MAR II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Emergency Generator Room
Machine Id
Emergency Generator (S/N 40601268)
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (30 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

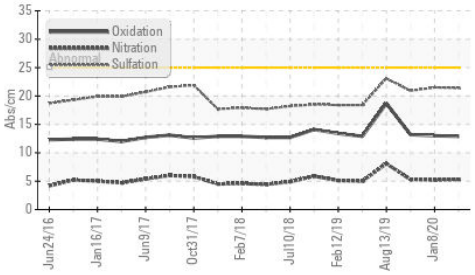
There is no indication of any contamination in the oil.

FLUID CONDITION

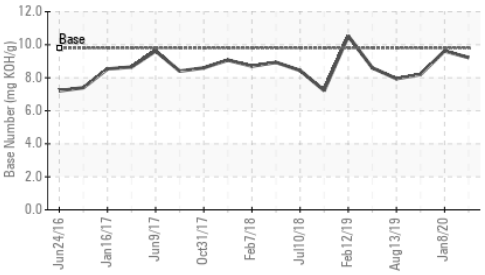
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0380433	WC0380406	WC0380417
Sample Date		Client Info		08 Mar 2020	08 Jan 2020	14 Nov 2019
Machine Age	hrs	Client Info		1362	1339	1336
Oil Age	hrs	Client Info		4	5	28
Filter Age	hrs	Client Info		54	31	28
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	MARGINAL
Iron	ppm	ASTM D5185(m)	>80	<1	<1	2
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)		0	1	0
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>15	0	0	<1
Copper	ppm	ASTM D5185(m)	>230	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	3	3	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel		WC Method	>5	<1.0	<1.0	▲ 3.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.3	5.2	5.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	21.5	20.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Boron	ppm	ASTM D5185(m)	0	2	1	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	57	58	56
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	925	954	915
Calcium	ppm	ASTM D5185(m)	1070	1031	1022	998
Phosphorus	ppm	ASTM D5185(m)	1150	1018	1013	989
Zinc	ppm	ASTM D5185(m)	1270	1182	1185	1156
Sulfur	ppm	ASTM D5185(m)	2060	2631	2619	2555
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.9	13.0	13.2
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	9.22	9.62	8.20
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.9	13.6	13.0

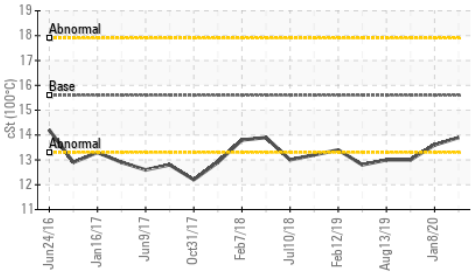
FT-IR (Direct Trend)



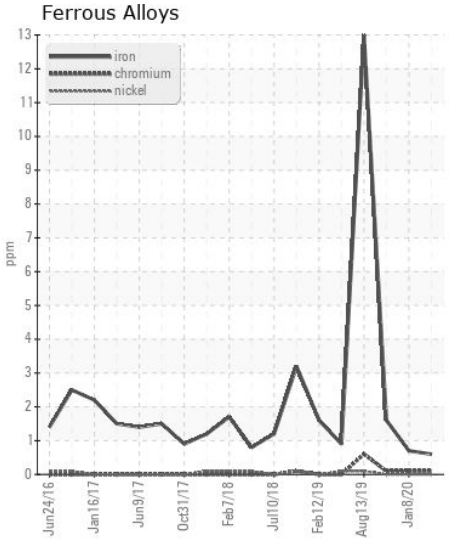
Base Number



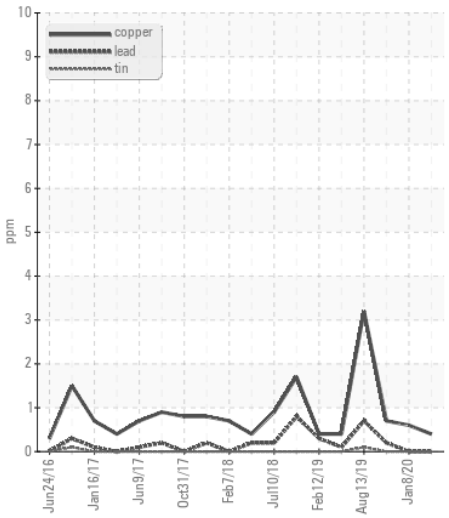
Viscosity @ 100°C



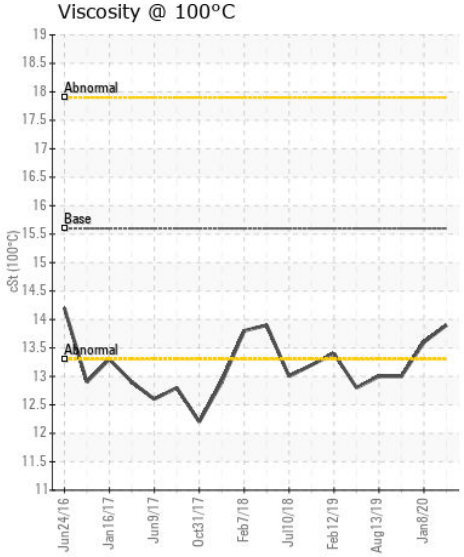
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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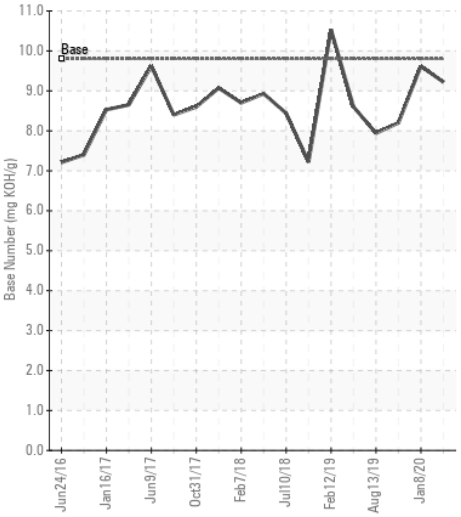

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0380433
Lab Number : 02342598
Unique Number : 5018026
Test Package : MAR 2

Received : 10 Mar 2020
Tested : 10 Mar 2020
Diagnosed : 10 Mar 2020 - Wes Davis

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.

CANADIAN COAST GUARD
CCGS GRIFFON, PO BOX 1000, 401 KING ST.W
Prescott, ON
CA K6V 5T3
Contact: Laurie Bosley
Laurie.Bosley@dfo-mpo.gc.ca
T:
F: (519)383-1994