



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
11135

Component
Front Diesel Engine

Fluid
CASTROL HYPURON ADVANCED FORMULA (40 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083043	PC0067927	PC0061112
Sample Date		Client Info		02 Jul 2024	13 Apr 2023	06 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	15	15	14
Chromium	ppm	ASTM D5185(m)	>20	<1	0	<1
Nickel	ppm	ASTM D5185(m)	>5	2	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	3	2
Lead	ppm	ASTM D5185(m)	>40	<1	3	<1
Copper	ppm	ASTM D5185(m)	>330	2	19	1
Tin	ppm	ASTM D5185(m)	>15	2	4	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

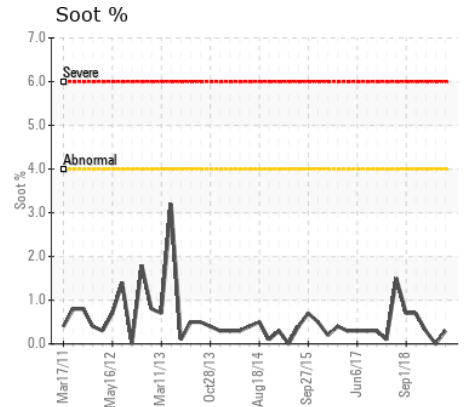
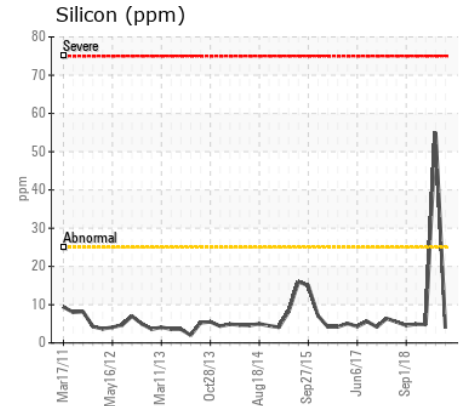
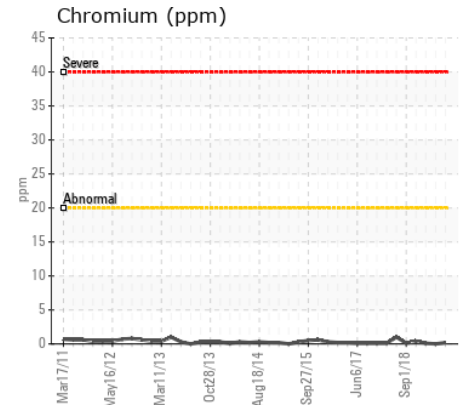
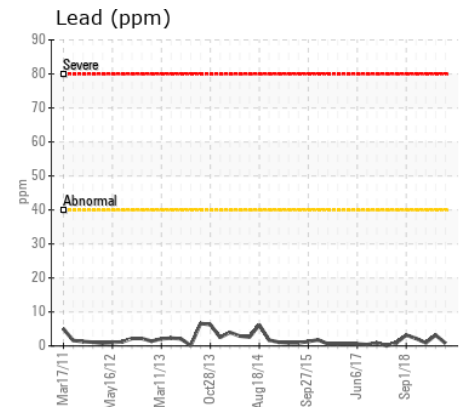
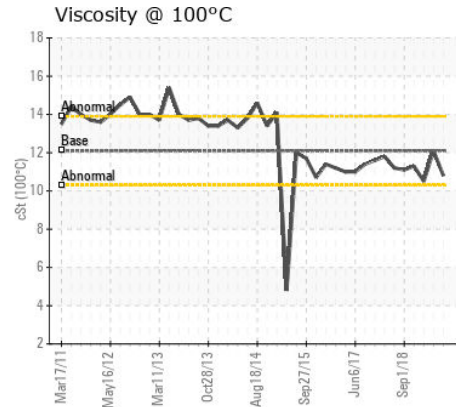
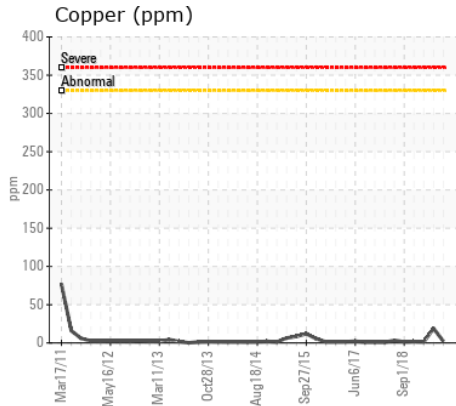
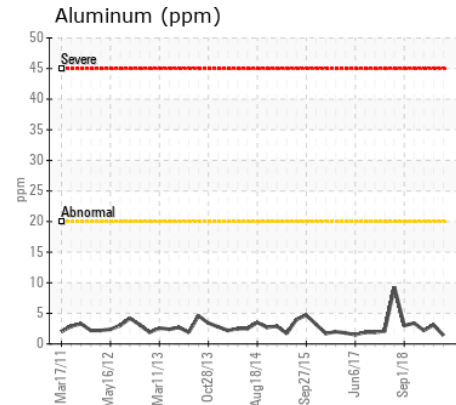
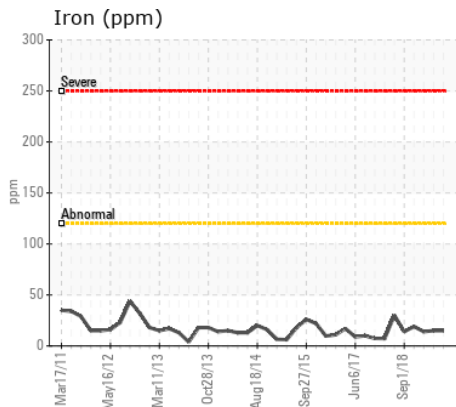
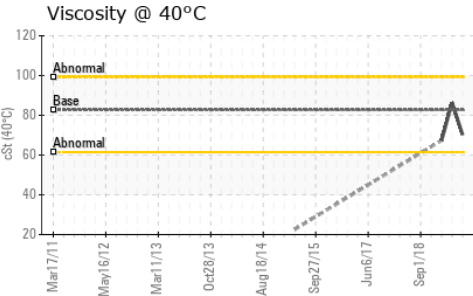
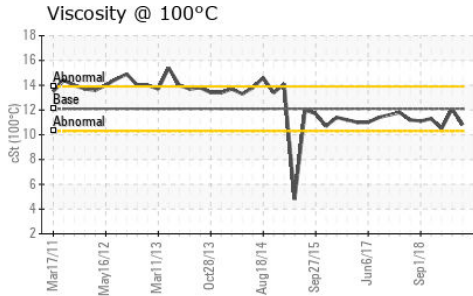
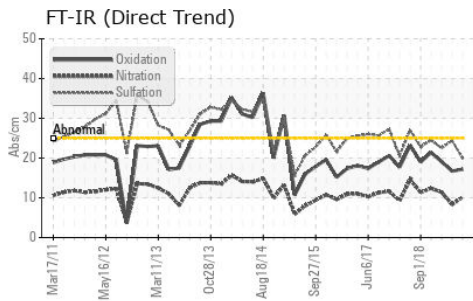
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	▲ 55	5
Potassium	ppm	ASTM D5185(m)	>20	2	7	1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.3	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	10.2	8.3	11.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	24.4	22.5
Silt	scalar	Visual*	NONE	NONE	VLITE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		8	8	13
Boron	ppm	ASTM D5185(m)		6	161	12
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		60	96	60
Manganese	ppm	ASTM D5185(m)		<1	3	<1
Magnesium	ppm	ASTM D5185(m)		921	615	952
Calcium	ppm	ASTM D5185(m)		1046	1641	1011
Phosphorus	ppm	ASTM D5185(m)		955	881	1048
Zinc	ppm	ASTM D5185(m)		1152	965	1150
Sulfur	ppm	ASTM D5185(m)		2463	2396	2529
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.2	16.7	19.1
Visc @ 40°C	cSt	ASTM D7279(m)	82.7	70.2	86.3	67.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	10.8	12.1	10.5
Viscosity Index (VI)	Scale	ASTM D2270*	142	143	134	143



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083043
Lab Number : 02645212
Unique Number : 5802751
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 03 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - 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.

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