



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
11151

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		PC0083055	PC0071329	PC0061065
Sample Date		Client Info		23 May 2024	28 Apr 2024	28 Sep 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	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	2	6	7
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	1	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

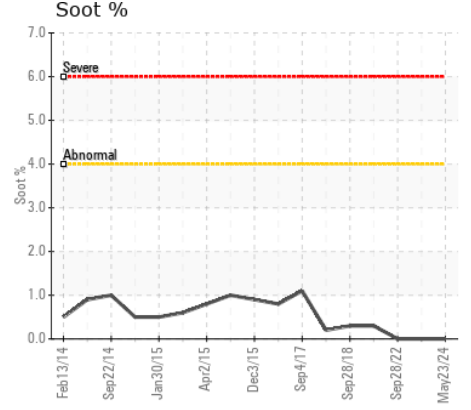
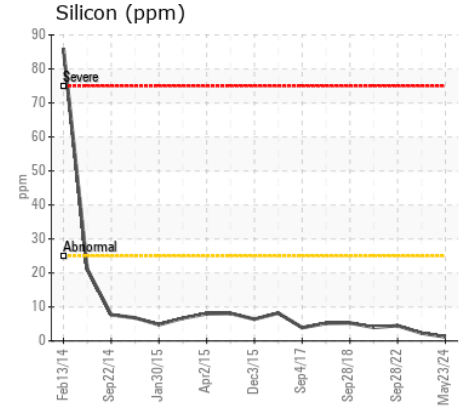
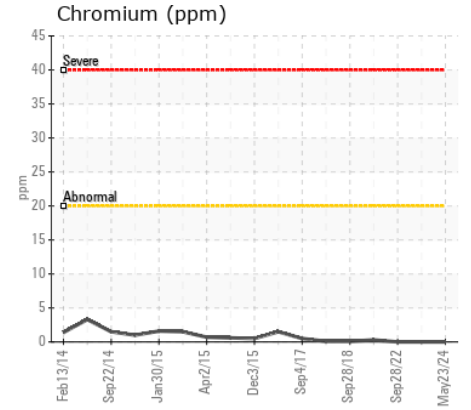
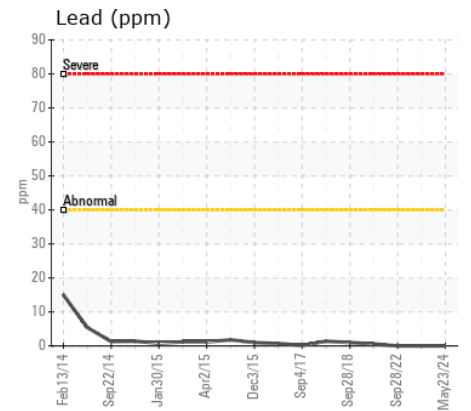
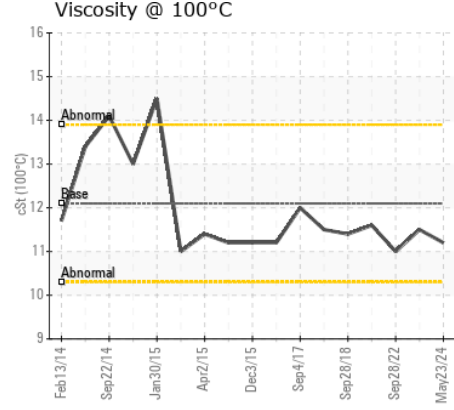
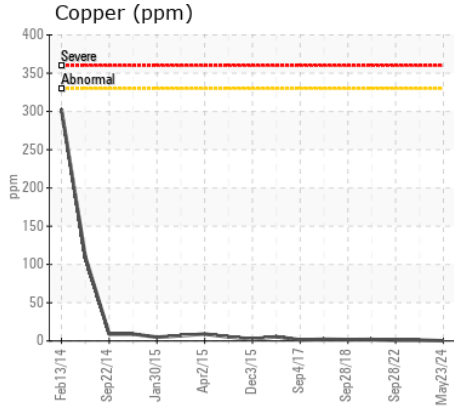
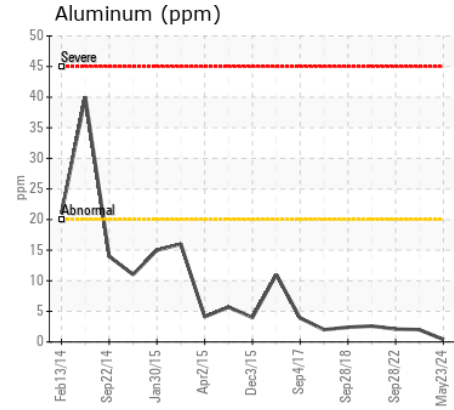
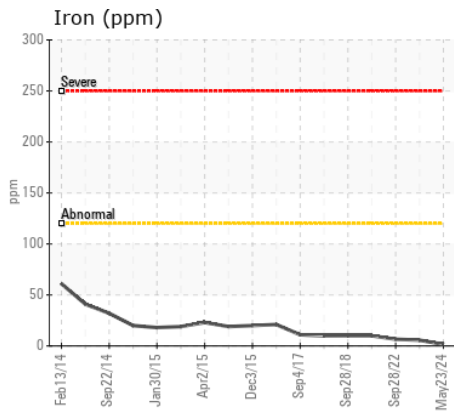
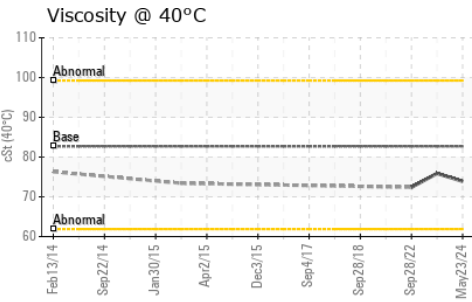
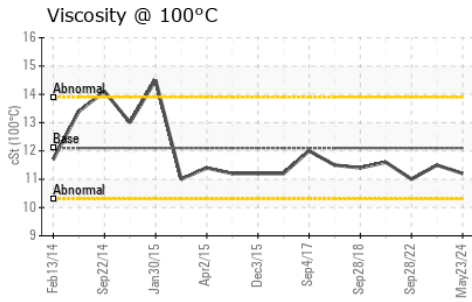
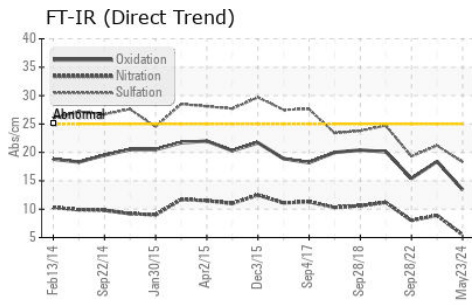
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	2	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<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	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.5	8.9	8.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	21.2	19.3
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)		4	8	6
Boron	ppm	ASTM D5185(m)		13	4	23
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		58	61	59
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		939	991	953
Calcium	ppm	ASTM D5185(m)		1054	1072	1051
Phosphorus	ppm	ASTM D5185(m)		965	995	1040
Zinc	ppm	ASTM D5185(m)		1134	1198	1168
Sulfur	ppm	ASTM D5185(m)		2520	2223	2638
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.4	18.4	15.4
Visc @ 40°C	cSt	ASTM D7279(m)	82.7	73.9	75.9	72.4
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	11.2	11.5	11.0
Viscosity Index (VI)	Scale	ASTM D2270*	142	142	144	142



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083055 **Received** : 24 May 2024
Lab Number : 02637420 **Tested** : 24 May 2024
Unique Number : 5786582 **Diagnosed** : 24 May 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI)

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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.