



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
11136
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		PC0083050	AP108345	AP107043
Sample Date		Client Info		14 May 2024	13 Nov 2018	05 Jul 2018
Machine Age	hrs	Client Info		0	27731	26834
Oil Age	hrs	Client Info		0	897	691
Filter Age	hrs	Client Info		0	897	691
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	27	9	8
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<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	3	2	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
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

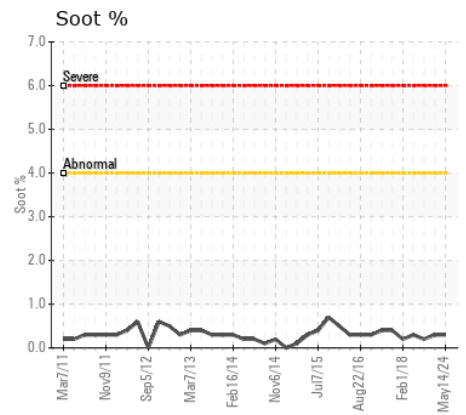
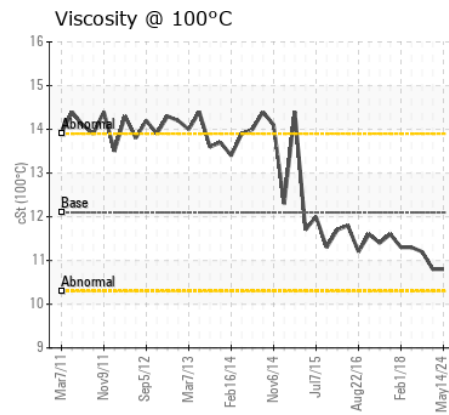
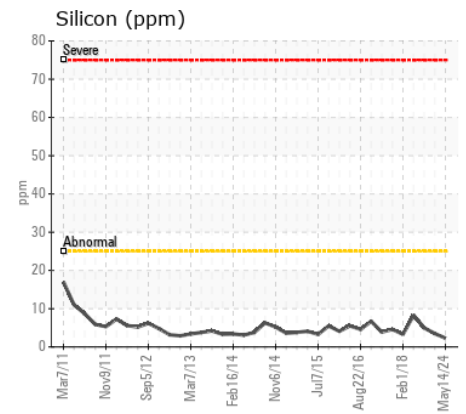
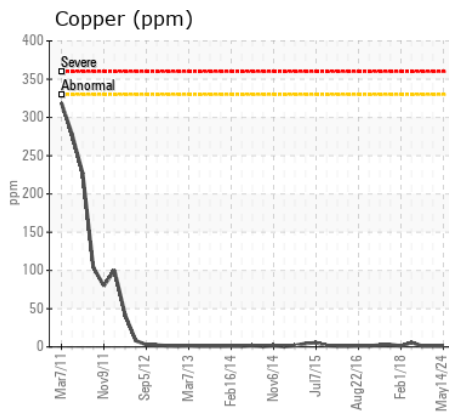
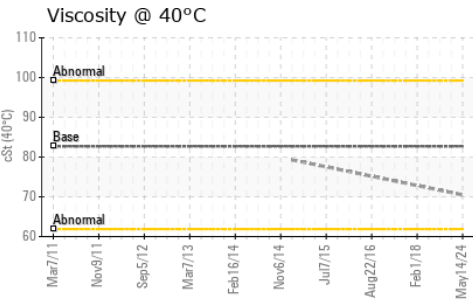
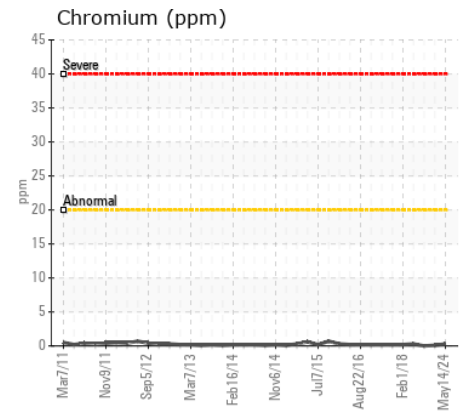
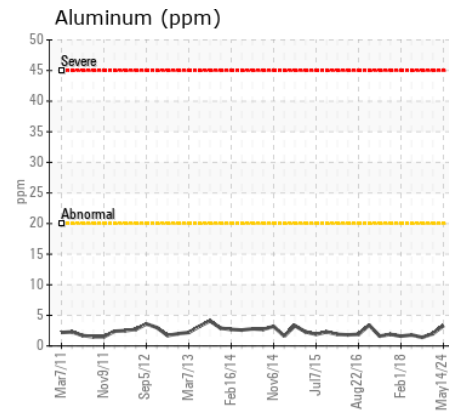
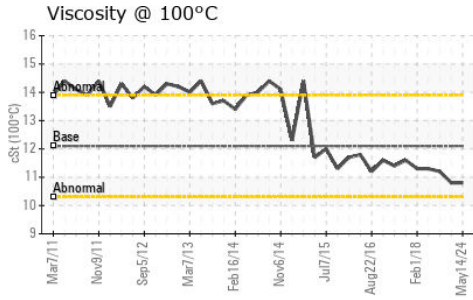
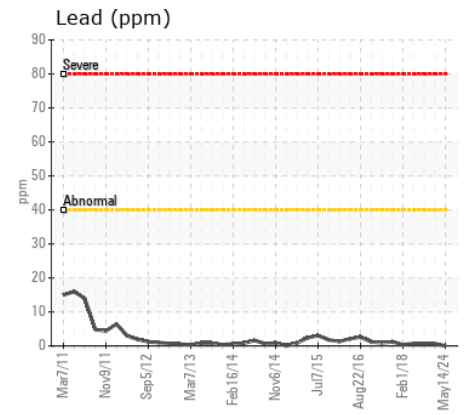
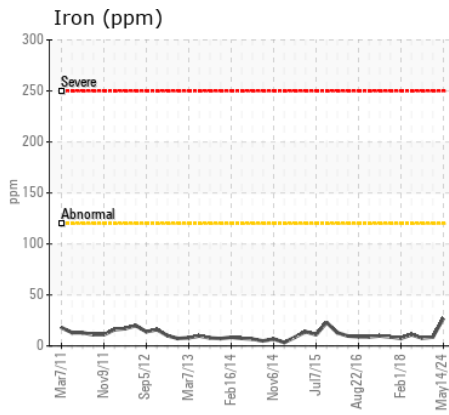
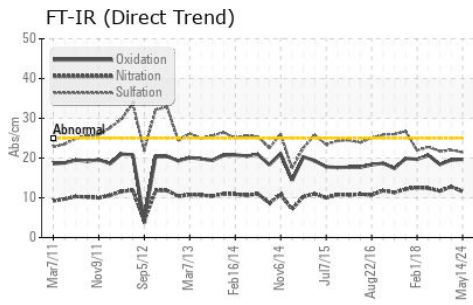
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	2	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	0.3	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	11.6	12.8	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.4	22.0	21.7
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)		9	10	7
Boron	ppm	ASTM D5185(m)		2	17	23
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		58	56	52
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		956	968	950
Calcium	ppm	ASTM D5185(m)		1021	892	987
Phosphorus	ppm	ASTM D5185(m)		936	904	963
Zinc	ppm	ASTM D5185(m)		1150	1133	1163
Sulfur	ppm	ASTM D5185(m)		2403	2705	2785
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.7	19.5	18.4
Visc @ 40°C	cSt	ASTM D7279(m)	82.7	70.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	10.8	10.8	11.2
Viscosity Index (VI)	Scale	ASTM D2270*	142	142	---	---



ISO 17025:2017
 Accredited
 Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083050
Lab Number : 02637429
Unique Number : 5786591
Test Package : MOB 1 (Additional Tests: KV40, VI)

Received : 24 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Wes Davis

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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.