



Machine Id
14130
Component
Diesel Engine
Fluid

CASTROL HYPURON ADVANCED FORMULA (40 LTR)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0071325	AP73493	AP76716
Sample Date		Client Info		05 Mar 2024	28 Jul 2011	12 May 2011
Machine Age	hrs	Client Info		0	2685	2088
Oil Age	hrs	Client Info		0	597	642
Filter Age	hrs	Client Info		0	597	642
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	3	14	16
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	3	5
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	4	4
Lead	ppm	ASTM D5185(m)	>40	0	2	2
Copper	ppm	ASTM D5185(m)	>330	3	6	17
Tin	ppm	ASTM D5185(m)	>15	0	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

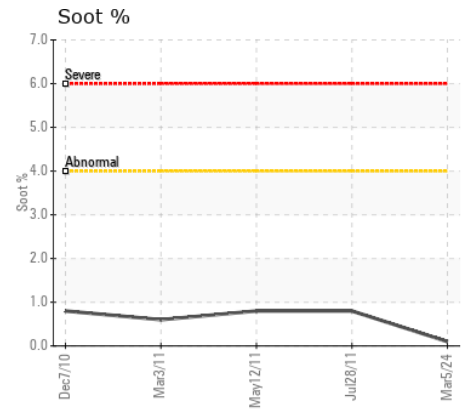
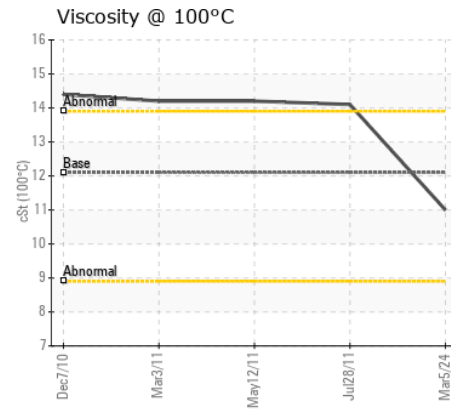
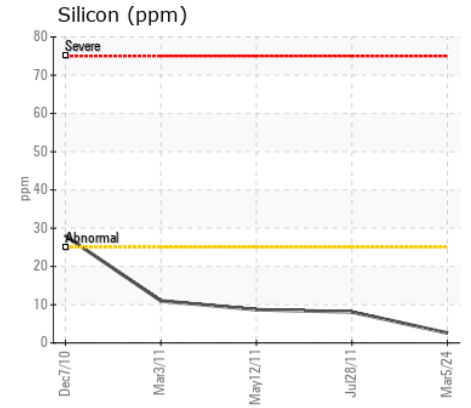
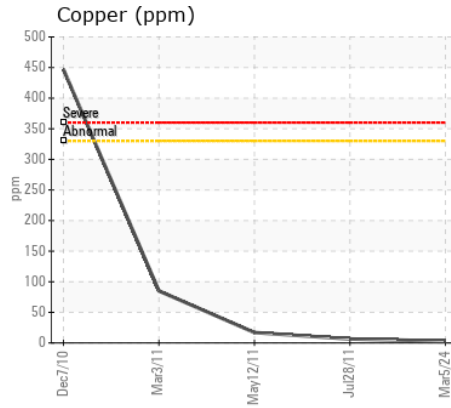
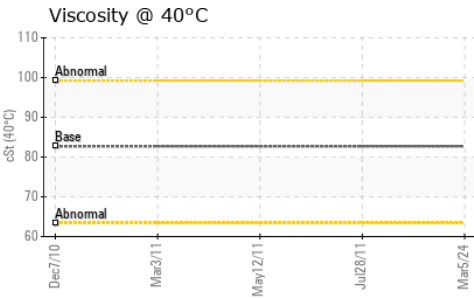
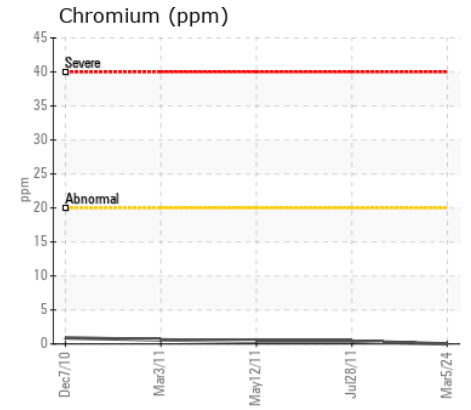
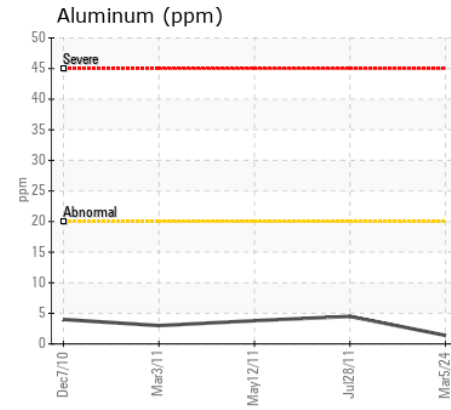
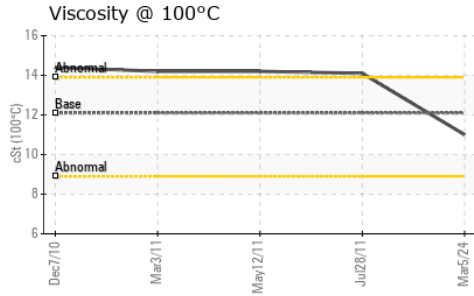
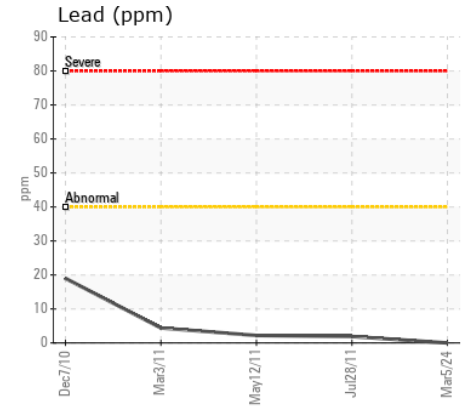
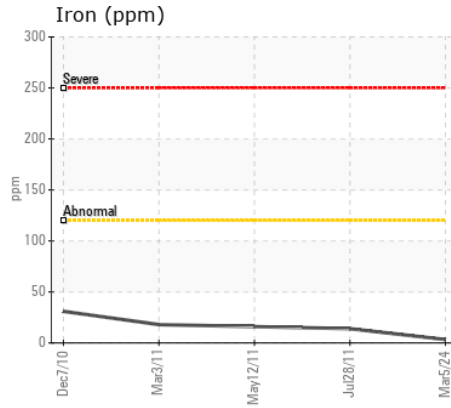
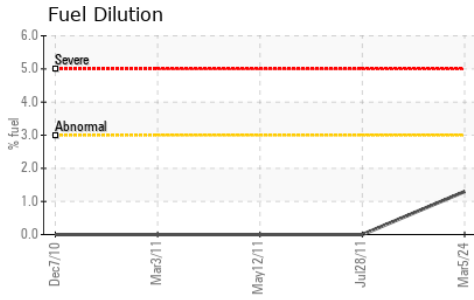
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	8	9
Potassium	ppm	ASTM D5185(m)	>20	<1	9	4
Fuel	%	ASTM D7593*	>3.0	1.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.1	0.8	0.8
Nitration	Abs/cm	ASTM D7624*	>20	5.7	11.2	11.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.8	26.7	26.3
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	16
Boron	ppm	ASTM D5185(m)		13	15	21
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		58	<1	<1
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		905	22	14
Calcium	ppm	ASTM D5185(m)		1015	2531	2293
Phosphorus	ppm	ASTM D5185(m)		961	947	949
Zinc	ppm	ASTM D5185(m)		1102	1293	1246
Sulfur	ppm	ASTM D5185(m)		2683	4308	3586
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.3	19.9	20.5
Visc @ 40°C	cSt	ASTM D7279(m)	82.7	71.0	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	11.0	14.1	14.2
Viscosity Index (VI)	Scale	ASTM D2270*	142	145	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0071325 **Received** : 06 Mar 2024
Lab Number : 02620122 **Tested** : 07 Mar 2024
Unique Number : 5737232 **Diagnosed** : 07 Mar 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI)

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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