



Machine Id
13146
Component
Front Diesel Engine
Fluid
CASTROL HYPURON ADVANCED FORMULA (40 LTR)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

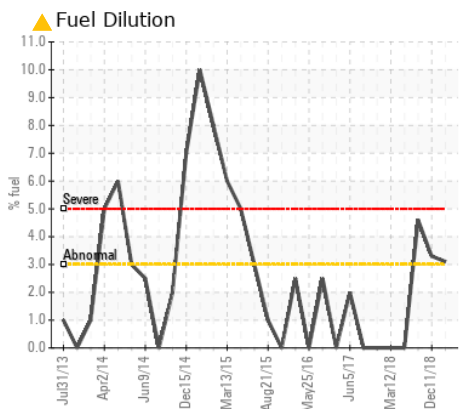
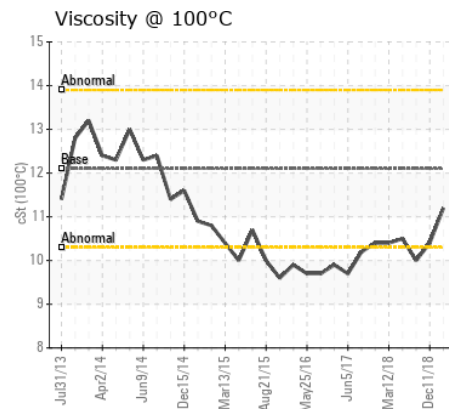
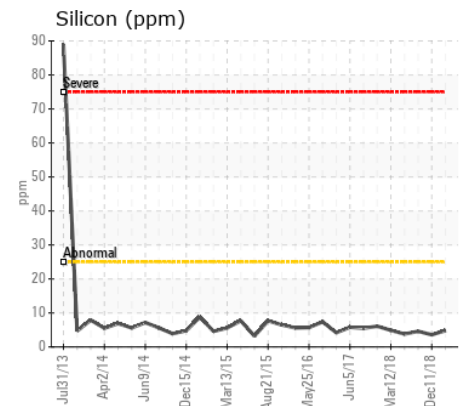
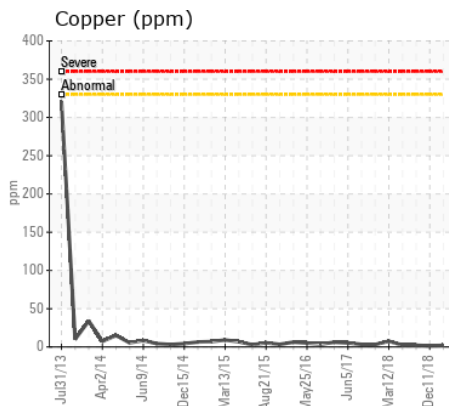
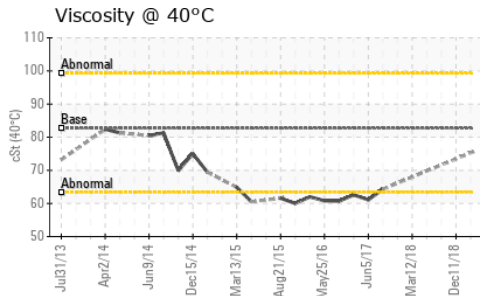
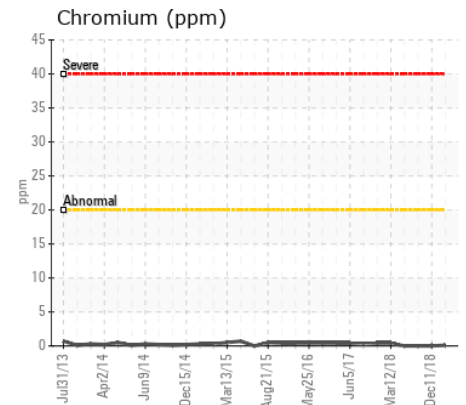
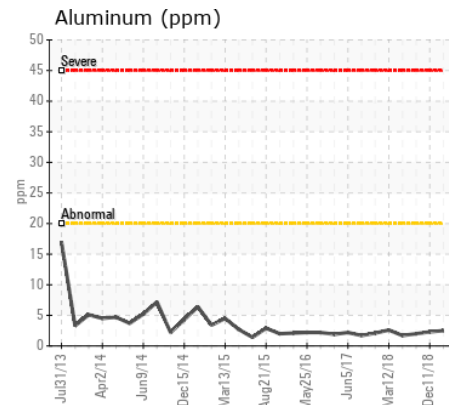
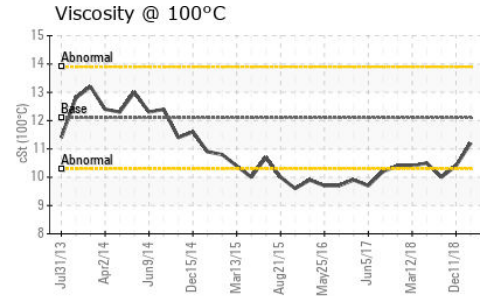
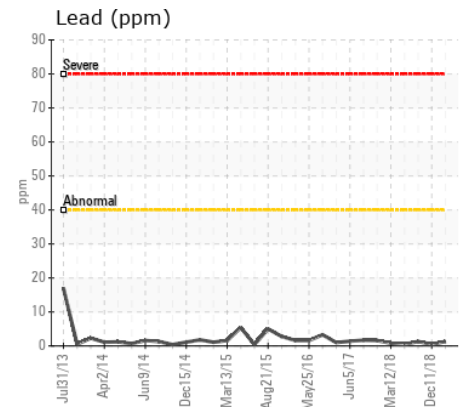
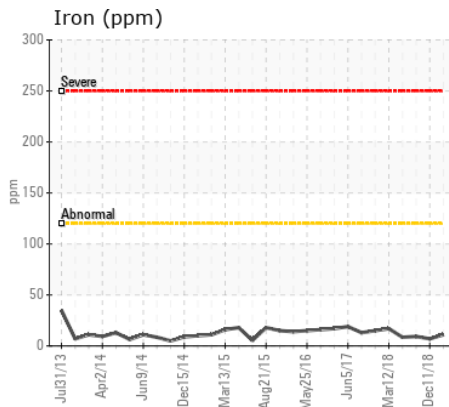
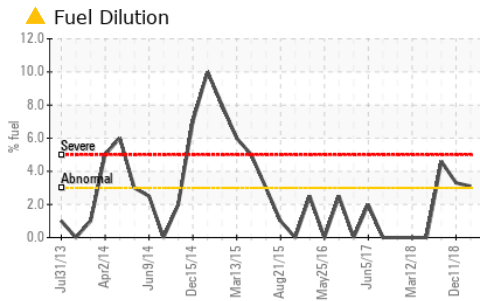
CONTAMINATION

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0071333	AP108342	AP106934
Sample Date		Client Info		05 Mar 2024	11 Dec 2018	24 Aug 2018
Machine Age	hrs	Client Info		0	17112	16323
Oil Age	hrs	Client Info		0	789	919
Filter Age	hrs	Client Info		0	789	919
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>120	11	7	9
Chromium	ppm	ASTM D5185(m)	>20	<1	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	1	<1	1
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	5	4	5
Potassium	ppm	ASTM D5185(m)	>20	2	<1	<1
Fuel	%	ASTM D7593*	>3.0	▲ 3.1	▲ 3.3	▲ 4.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.2	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	12.4	11.3	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.0	22.5	24.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		14	9	12
Boron	ppm	ASTM D5185(m)		3	19	10
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		58	56	52
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		937	971	936
Calcium	ppm	ASTM D5185(m)		1041	884	889
Phosphorus	ppm	ASTM D5185(m)		981	917	904
Zinc	ppm	ASTM D5185(m)		1153	1120	1112
Sulfur	ppm	ASTM D5185(m)		2280	2615	2455
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.3	18.6	20.5
Visc @ 40°C	cSt	ASTM D7279(m)	82.7	75.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.1	11.2	10.4	▲ 10.0
Viscosity Index (VI)	Scale	ASTM D2270*	142	139	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0071333 **Received** : 06 Mar 2024
Lab Number : 02620124 **Tested** : 07 Mar 2024
Unique Number : 5737234 **Diagnosed** : 07 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, VI)

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 F: (416)787-6210

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.