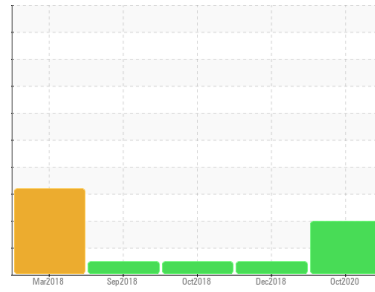


OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
HINO 185151

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (10 QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0021868	PCAM132143	PCAM128638
Sample Date	Client Info			01 Oct 2020	10 Dec 2018	05 Oct 2018
Machine Age	mls	Client Info		120404	0	0
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	24	46	48
Chromium	ppm	ASTM D5185m	>20	4	1	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 29	12	20
Lead	ppm	ASTM D5185m	>40	0	2	3
Copper	ppm	ASTM D5185m	>330	31	103	115
Tin	ppm	ASTM D5185m	>15	1	1	0
Antimony	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

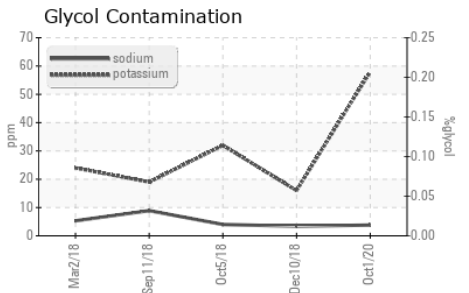
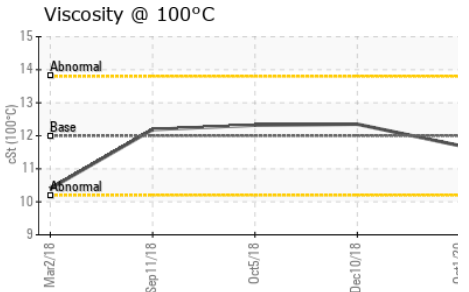
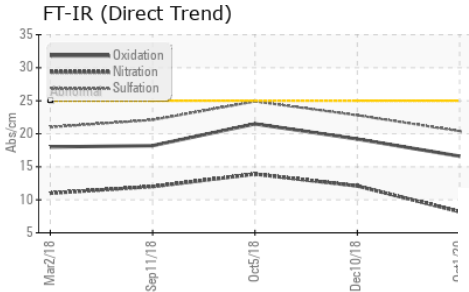
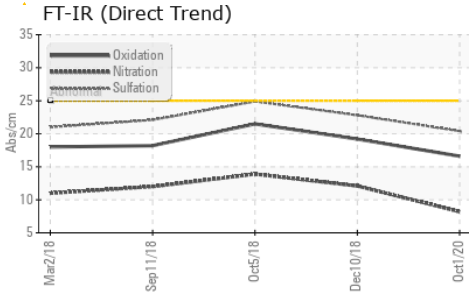
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	12	4	2
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	54	58	56
Manganese	ppm	ASTM D5185m	0	<1	1	2
Magnesium	ppm	ASTM D5185m	950	777	910	898
Calcium	ppm	ASTM D5185m	1050	1245	1174	1172
Phosphorus	ppm	ASTM D5185m	995	939	848	840
Zinc	ppm	ASTM D5185m	1180	1177	1056	1155
Sulfur	ppm	ASTM D5185m	2600	2246	3113	2147

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	5	9
Sodium	ppm	ASTM D5185m		4	3	4
Potassium	ppm	ASTM D5185m	>20	▲ 58	16	32
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	1.5	1.9
Nitration	Abs/cm	*ASTM D7624	>20	8.2	12.1	13.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	22.8	24.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	19.2	21.5

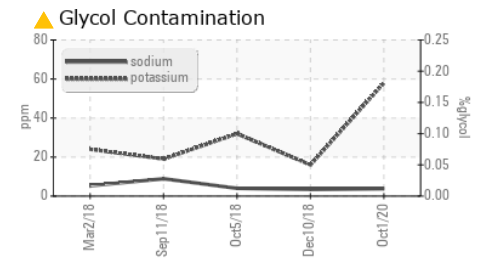
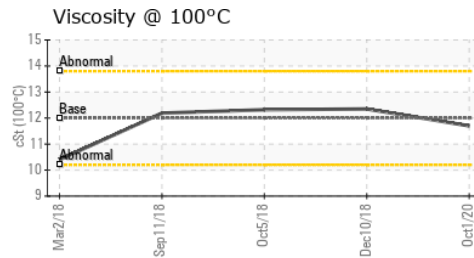
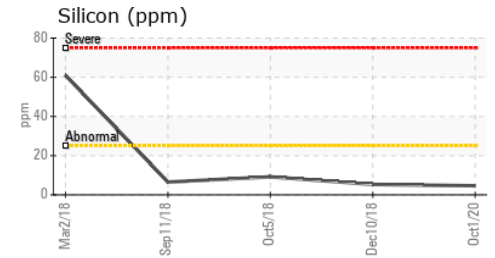
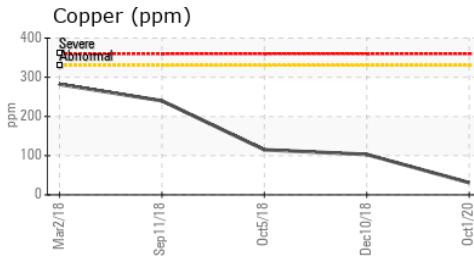
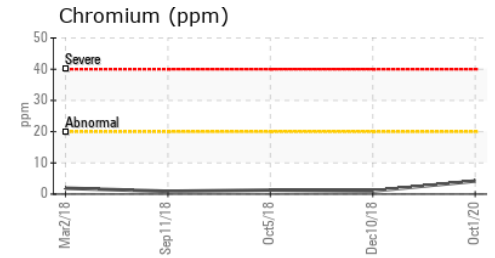
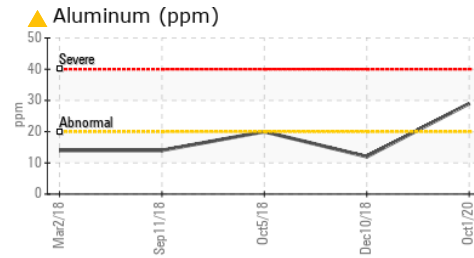
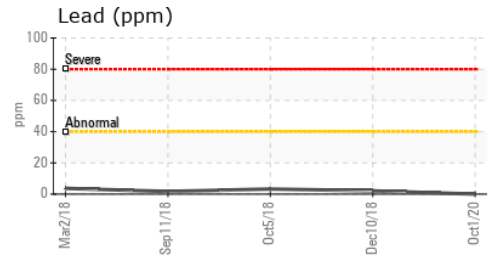
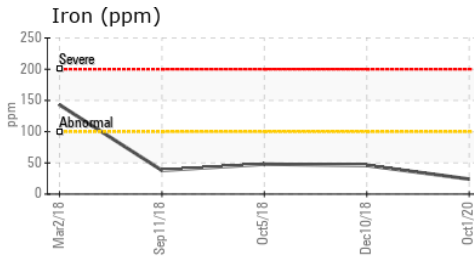
OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.7	12.35

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0021868
Lab Number : 05095266
Unique Number : 9220507
Test Package : MOB 1 (Additional Tests: Glycol)
Received : 20 Oct 2020
Tested : 22 Oct 2020
Diagnosed : 22 Oct 2020 - Jonathan Hester

MILLER TRUCK LEASING #122
 256 MURPHY RD
 HARTFORD, CT
 US 06114
 Contact: JEREMY CLOUTIER
 jcloutier@millertransgroup.com
 T: (860)900-0230
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)