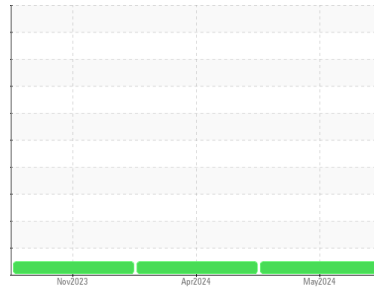


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
346674
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Note that there appears to be a discrepancy in the total time on this component, when compared to the historical data.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0124067	PCA0079271	PCA0110207
Sample Date	Client Info			20 May 2024	21 Apr 2024	30 Nov 2023
Machine Age	mls	Client Info		48111	50036	24622
Oil Age	mls	Client Info		48111	65000	24622
Oil Changed	Client Info			Changed	N/A	Not Chngd
Sample Status				NORMAL	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	219	161	119
Chromium	ppm	ASTM D5185m	>20	6	4	2
Nickel	ppm	ASTM D5185m	>4	2	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	75	51	33
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	48	46	49
Tin	ppm	ASTM D5185m	>15	4	6	5
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

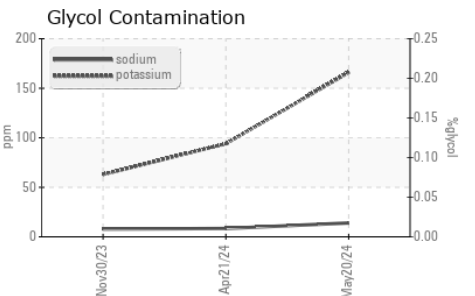
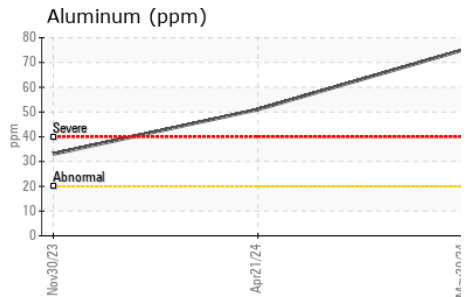
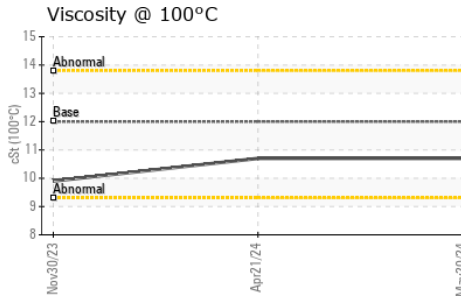
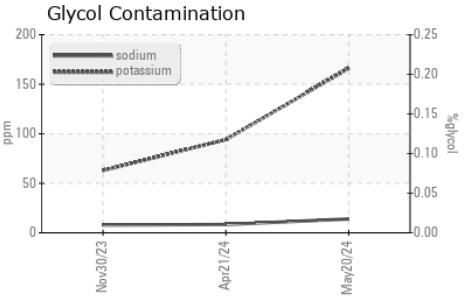
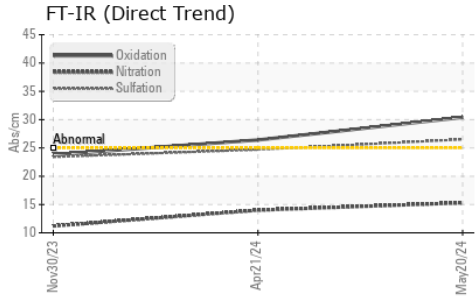
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	23	19	29
Barium	ppm	ASTM D5185m	0	0	0	<1
Molybdenum	ppm	ASTM D5185m	50	54	51	44
Manganese	ppm	ASTM D5185m	0	13	9	9
Magnesium	ppm	ASTM D5185m	950	705	679	535
Calcium	ppm	ASTM D5185m	1050	2017	1728	1727
Phosphorus	ppm	ASTM D5185m	995	929	837	790
Zinc	ppm	ASTM D5185m	1180	1238	1072	969
Sulfur	ppm	ASTM D5185m	2600	2549	2534	2155

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	23	42	13
Sodium	ppm	ASTM D5185m		14	8	8
Potassium	ppm	ASTM D5185m	>20	166	94	63
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.1	1.1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	15.3	14.0	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.5	24.7	23.4

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	30.4	26.4	23.8
Base Number (BN)	mg KOH/g	ASTM D2896		6.5	7.1	8.7

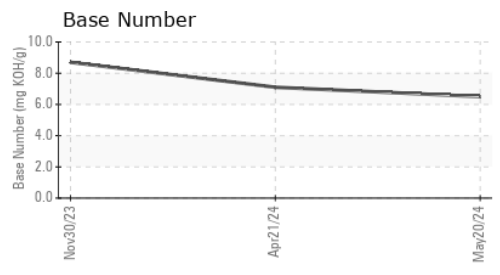
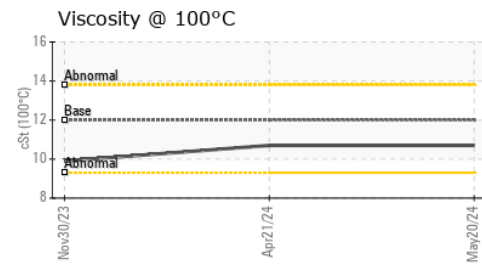
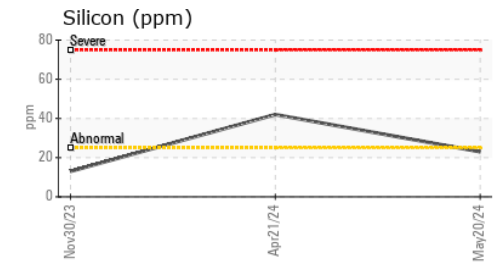
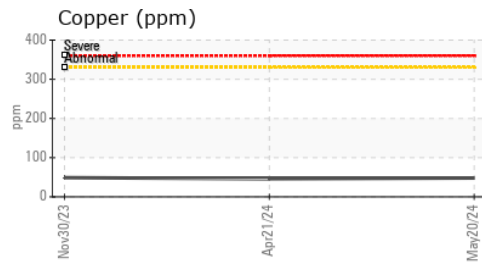
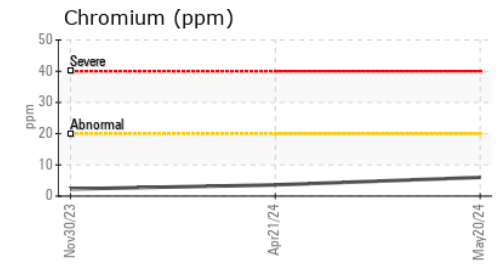
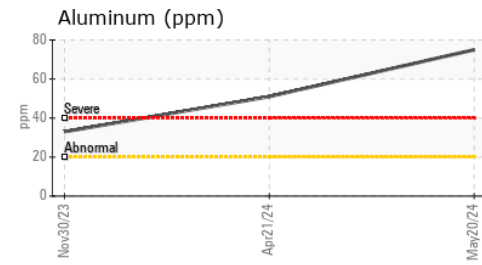
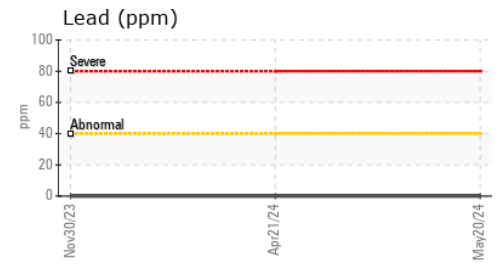
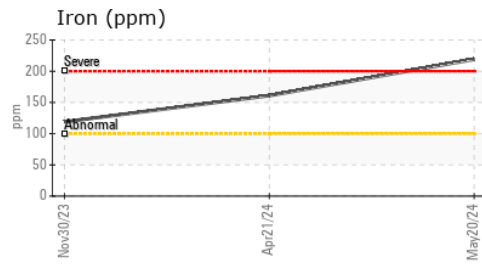
OIL ANALYSIS REPORT



VISUAL	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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	10.7	10.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124067 **Received** : 26 Jun 2024
Lab Number : 06220716 **Tested** : 27 Jun 2024
Unique Number : 11098913 **Diagnosed** : 27 Jun 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

MILLER TRUCK LEASING #121
 107 HOW LANE
 NEW BRUNSWICK, NJ
 US 08901
 Contact: Anthony Cursi
 acursi@millertransgroup.com
 T: (732)358-4027
 F: (732)400-8475

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)