

Machine Id
FREIGHTLINER 492396
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (36 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0083825	PCA0061126	PCA0042016
Sample Date	Client Info			09 Jul 2023	01 Jun 2022	19 Sep 2021
Machine Age	mls Client Info			256411	205535	174367
Oil Age	mls Client Info			50875	31168	53959
Oil Changed	Client Info			Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>65	44	27	33
Chromium	ppm	ASTM D5185m	>5	2	2	3
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>5	56	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>35	17	13	20
Lead	ppm	ASTM D5185m	>10	<1	<1	<1
Copper	ppm	ASTM D5185m	>180	21	24	40
Tin	ppm	ASTM D5185m	>8	2	1	4
Antimony	ppm	ASTM D5185m	>35	---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0

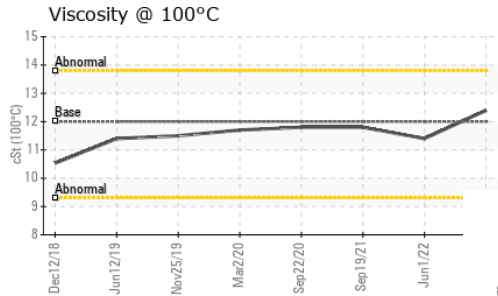
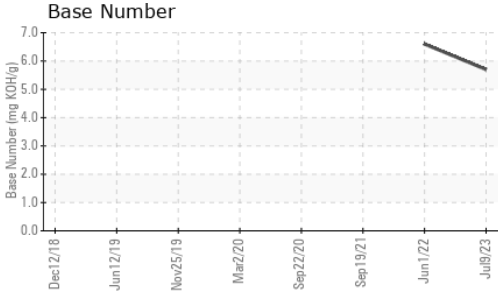
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	11	16	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	25	57	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	567	826	908
Calcium	ppm	ASTM D5185m	1050	1567	1061	1098
Phosphorus	ppm	ASTM D5185m	995	954	789	887
Zinc	ppm	ASTM D5185m	1180	1217	1074	1238
Sulfur	ppm	ASTM D5185m	2600	3106	2507	2156

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	6	4	4
Sodium	ppm	ASTM D5185m		4	2	4
Potassium	ppm	ASTM D5185m	>20	19	16	30

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.8	1.1	1.4
Nitration	Abs/cm	*ASTM D7624	>20	11.5	9.4	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.7	20.7	23.5

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	14.8	18.2
Base Number (BN)	mg KOH/g	ASTM D2896		5.7	6.6	---

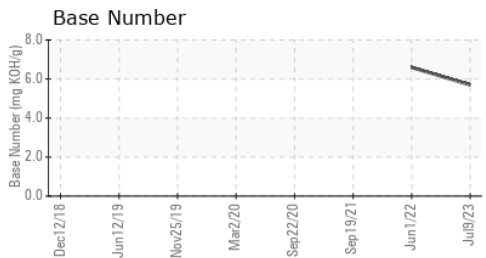
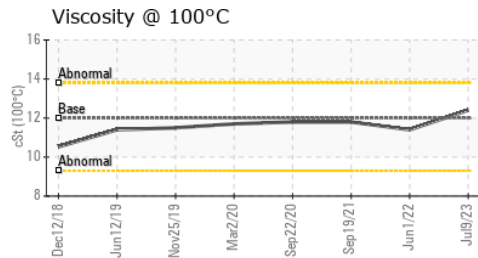
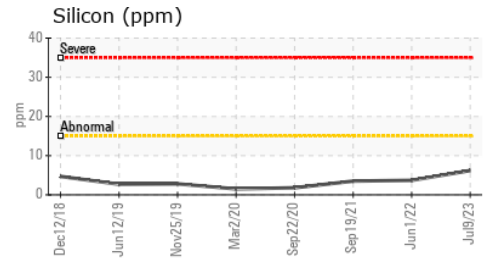
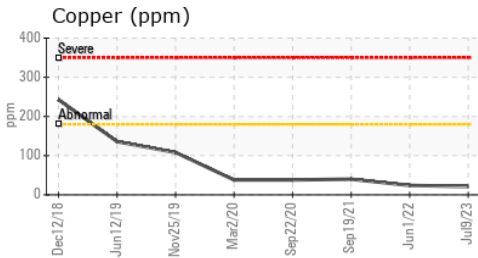
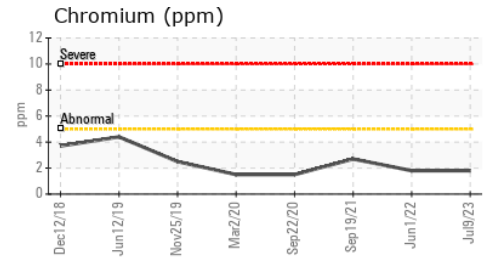
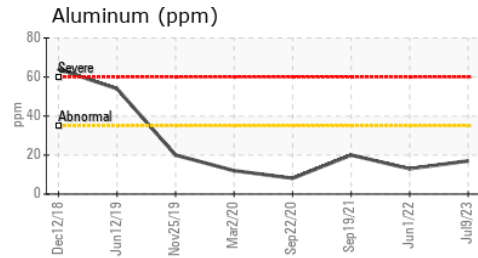
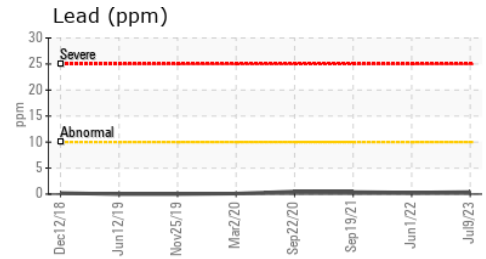
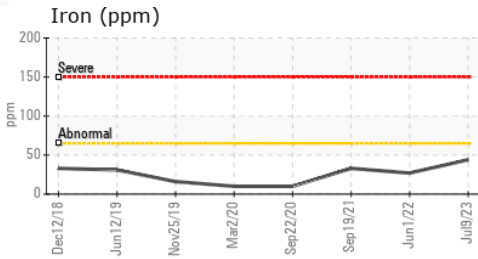
OIL ANALYSIS REPORT



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	12.4	11.4	11.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0083825 **Received** : 20 Oct 2023
Lab Number : **05984532** **Diagnosed** : 23 Oct 2023
Unique Number : 10701827 **Diagnostician** : Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

MILLER TRUCK LEASING #123
 66 KELLER AVENUE
 LANCASTER, PA
 US 17601
 Contact: RON ROBERTS
 roberts@millertransgroup.com
 T: (717)945-6205
 F: (717)945-5818

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)