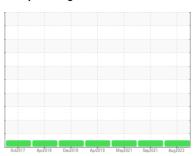


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



FREIGHTLINER 2462

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (18 QTS)

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.

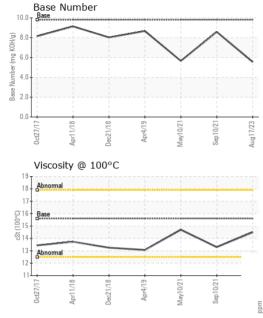
Fluid Condition

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

18)		Oct2017	Apr2018 Dec2018	Apr2019 May2021 Sep2021	Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RW0004668	RW0002432	RW0002052
Sample Date		Client Info		17 Aug 2023	10 Sep 2021	10 May 2021
Machine Age	hrs	Client Info		9963	7388	7187
Oil Age	hrs	Client Info		665	200	500
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	Ν	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	>130	65	20	16
Chromium	ppm	ASTM D5185m	>10	2	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	7	79
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	4	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>125	1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		76	17	74
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		8	60	5
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		138	830	358
Calcium	ppm	ASTM D5185m		2164	1199	1680
Phosphorus	ppm	ASTM D5185m		1025	954	943
Zinc	ppm	ASTM D5185m		1269	1156	1100
Sulfur	ppm	ASTM D5185m		4142	2688	3046
CONTAMINANTS	6	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	1	5
Sodium	ppm	ASTM D5185m		4	2	18
Potassium	ppm	ASTM D5185m	>20	10	4	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.9	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.4	9.1	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.1	19.8	25.4
FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.6	15.8	21.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.55	8.59	5.66
	0					

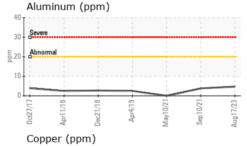


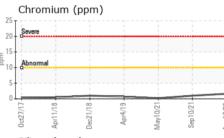
OIL ANALYSIS REPORT

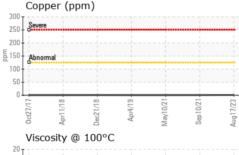


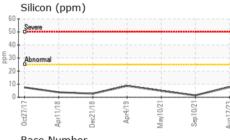
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FILIIN PROPERT	TIEC	mothod	limit/basa	current	history1	history?

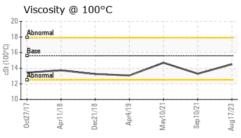
	Visc @ 100°C	cSt	ASTM D445 15.6	14.5	13.3	14.7	
	GRAPHS						
	Iron (ppm)			Lead (ppm)		
2	Severe			Severe Severe			
	50 - Abnormal			30			

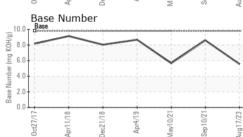
















Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 2

: RW0004668 : 05936340

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

: 10621611

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 Aug 2023 Diagnosed Diagnostician : Sean Felton

: 29 Aug 2023

MUSKEGON, MI US 49442 Contact: ERIC KING ewking@newkirk-electric.com T: (231)206-6131

* - 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)

Contact/Location: ERIC KING - NEWMUS

NEWKIRK ELECTRIC

1875 ROBERTS ST.

F: (231)724-4090