

Machine Id
FREIGHTLINER 8406
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (44 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0088615	PCA0051818	PCA0001600
Sample Date	Client Info		02 Oct 2023	15 Oct 2021	13 Feb 2020
Machine Age	mls	Client Info	763185	698488	623746
Oil Age	mls	Client Info	763185	698488	29559
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
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	30	20	15
Chromium	ppm	ASTM D5185m	>6	1	1	1
Nickel	ppm	ASTM D5185m	>3	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>50	8	9	11
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>50	6	3	2
Tin	ppm	ASTM D5185m	>6	<1	0	<1
Antimony	ppm	ASTM D5185m		---	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2	30	20	3
Barium	ppm	ASTM D5185m	0	9	0	0
Molybdenum	ppm	ASTM D5185m	50	48	48	59
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	547	746	889
Calcium	ppm	ASTM D5185m	1050	1640	1859	1000
Phosphorus	ppm	ASTM D5185m	995	734	863	924
Zinc	ppm	ASTM D5185m	1180	961	1048	1101
Sulfur	ppm	ASTM D5185m	2600	2560	3271	1799

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	11	7	4
Sodium	ppm	ASTM D5185m		5	4	2
Potassium	ppm	ASTM D5185m	>20	6	7	1

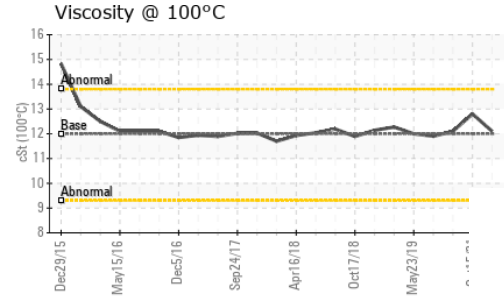
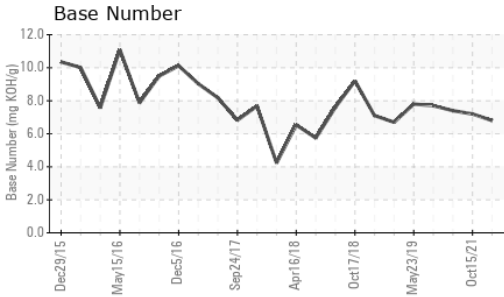
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	11.4	12	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	25.1	21.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.3	26.1	18.4
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	7.2	7.4

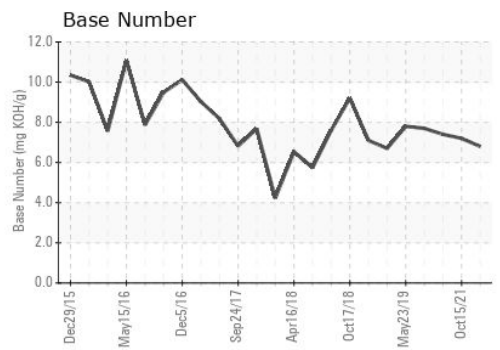
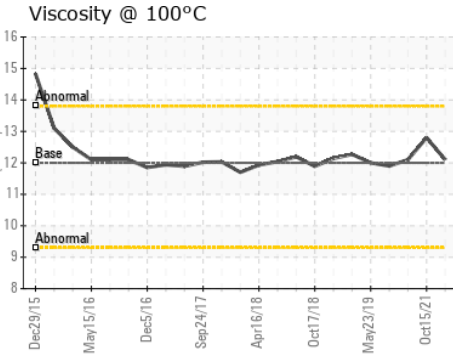
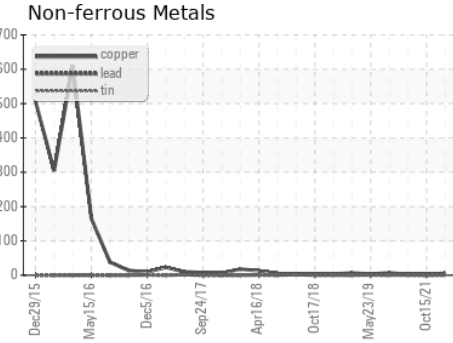
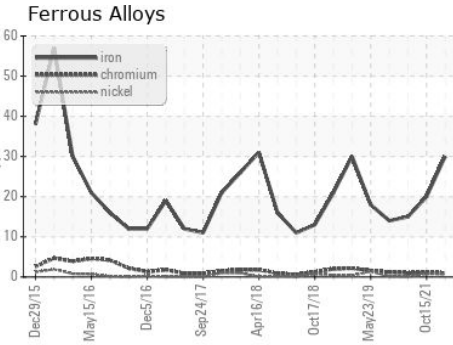
OIL ANALYSIS REPORT



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	12.1	12.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0088615 **Received** : 21 Nov 2023
Lab Number : 06013684 **Diagnosed** : 24 Nov 2023
Unique Number : 10752828 **Diagnostician** : Jonathan Hester
Test Package : FLEET

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Certificate L2367
 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)