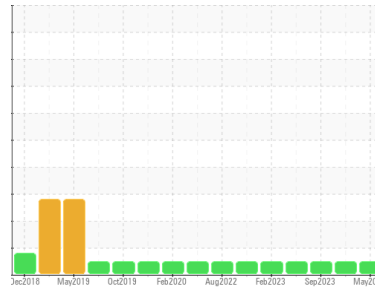




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 1154
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (40 LTR)

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	WC0851783	WC0733160	WC0733127
Sample Date	Client Info	27 May 2024	23 Jan 2024	19 Sep 2023
Machine Age	kms Client Info	975587	910641	848264
Oil Age	kms Client Info	65000	65000	40000
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 >65	21	20	12
Chromium	ppm ASTM D5185m >5	2	1	<1
Nickel	ppm ASTM D5185m >3	<1	0	0
Titanium	ppm ASTM D5185m >5	<1	<1	0
Silver	ppm ASTM D5185m >2	<1	0	0
Aluminum	ppm ASTM D5185m >35	7	11	3
Lead	ppm ASTM D5185m >10	<1	<1	0
Copper	ppm ASTM D5185m >180	4	3	3
Tin	ppm ASTM D5185m >8	1	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	41	21	24
Barium	ppm ASTM D5185m	2	0	0
Molybdenum	ppm ASTM D5185m	4	<1	0
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	789	732	692
Calcium	ppm ASTM D5185m 2900	1436	1289	1253
Phosphorus	ppm ASTM D5185m 1100	858	707	671
Zinc	ppm ASTM D5185m 1200	912	830	750
Sulfur	ppm ASTM D5185m 4000	3319	2866	2515

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	6	6	4
Sodium	ppm ASTM D5185m	4	2	0
Potassium	ppm ASTM D5185m >20	7	8	<1

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.5	0.6	0.5
Nitration	Abs/cm *ASTM D7624 >20	9.8	10.6	10.0
Sulfation	Abs/.1mm *ASTM D7415 >30	23.6	24.7	22.9

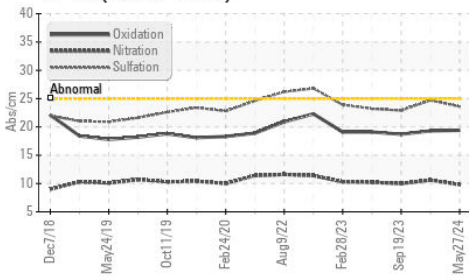
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	19.4	19.3	18.7
Base Number (BN)	mg KOH/g ASTM D2896 10.3	5.28	5.90	5.95

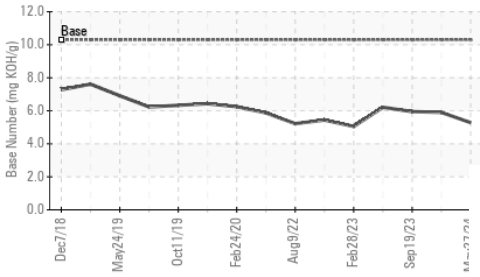


OIL ANALYSIS REPORT

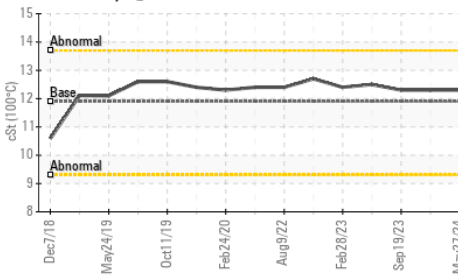
FT-IR (Direct Trend)



Base Number



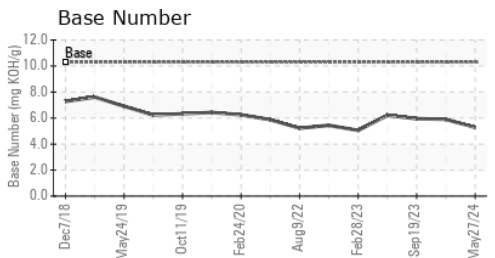
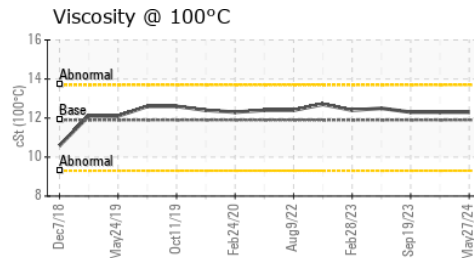
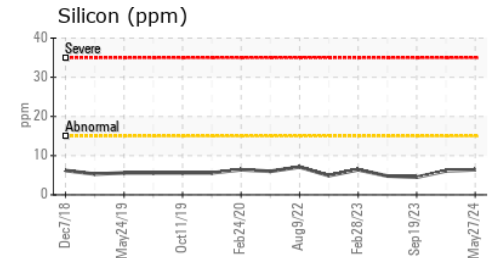
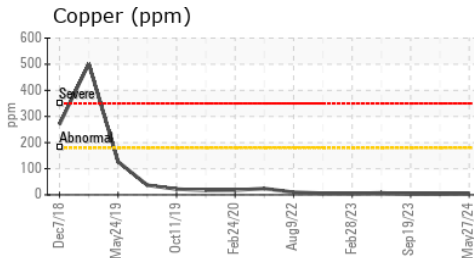
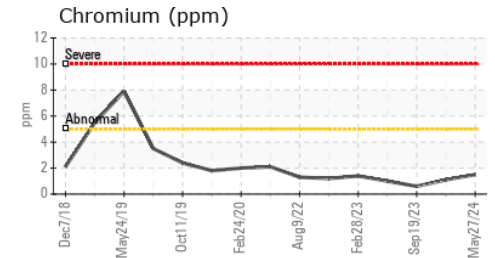
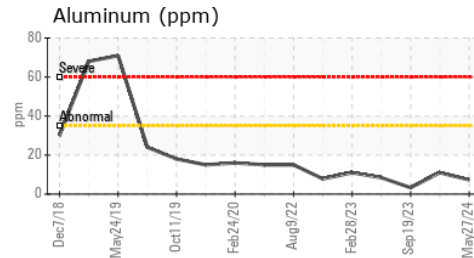
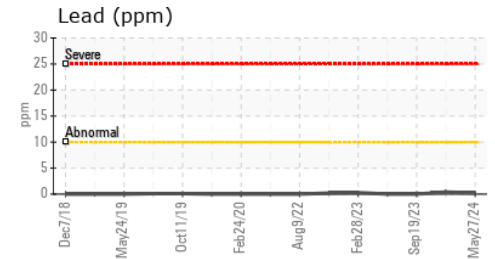
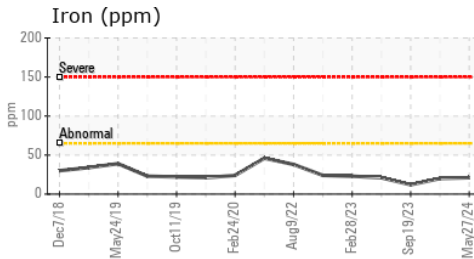
Viscosity @ 100°C



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	11.9	12.3	12.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0851783
 Lab Number : 06196876
 Unique Number : 11058999
 Test Package : MOB 2

Received : 31 May 2024
 Tested : 03 Jun 2024
 Diagnosed : 03 Jun 2024 - Sean Felton

LYNDEN TRANSPORT - SPRUCE GROVE
 27340 ACHESON RD, ACHESON INDUSTRIAL PARK
 ACHESON, AB
 CA T7X 6B1

Contact: Mathieu Carby
 mcarby@lynden.com

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)

T:
F: