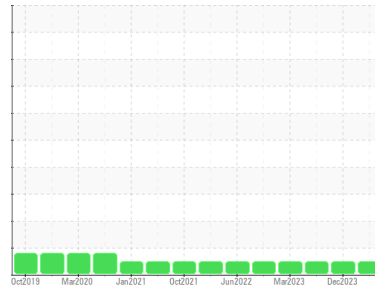




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
FREIGHTLINER 1166
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (--- 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		WC0851780	WC0851822	WC0733120
Sample Date	Client Info		22 May 2024	27 Dec 2023	15 Aug 2023
Machine Age	kms	Client Info	782158	718671	655324
Oil Age	kms	Client Info	65000	65000	65000
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	33	17	20
Chromium	ppm	ASTM D5185m	>5	3	<1	1
Nickel	ppm	ASTM D5185m	>3	1	<1	<1
Titanium	ppm	ASTM D5185m	>5	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>35	11	4	5
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>180	10	7	5
Tin	ppm	ASTM D5185m	>8	2	<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		33	20	18
Barium	ppm	ASTM D5185m		2	<1	0
Molybdenum	ppm	ASTM D5185m		2	1	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1178	761	939
Calcium	ppm	ASTM D5185m	2900	2110	1337	1696
Phosphorus	ppm	ASTM D5185m	1100	1227	777	847
Zinc	ppm	ASTM D5185m	1200	1341	837	1053
Sulfur	ppm	ASTM D5185m	4000	4949	3042	4129

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	11	6	6
Sodium	ppm	ASTM D5185m		7	0	<1
Potassium	ppm	ASTM D5185m	>20	9	6	5

INFRA-RED

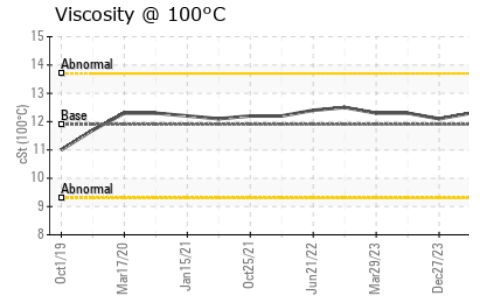
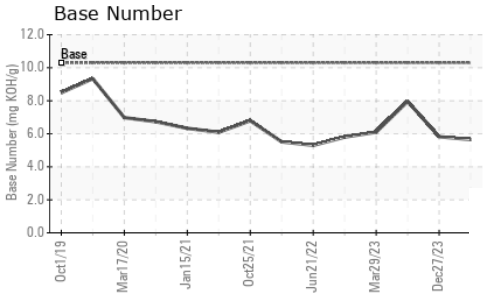
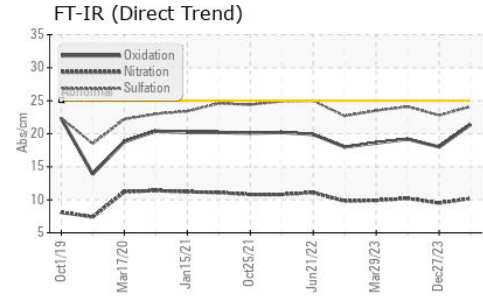
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.6	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	9.5	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	22.8	24.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	18.0	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.65	5.82	7.96



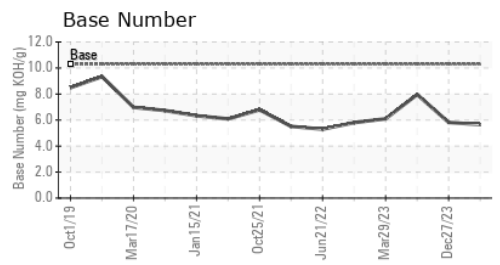
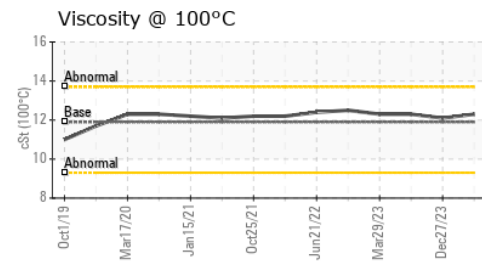
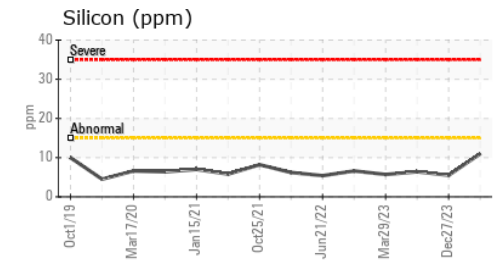
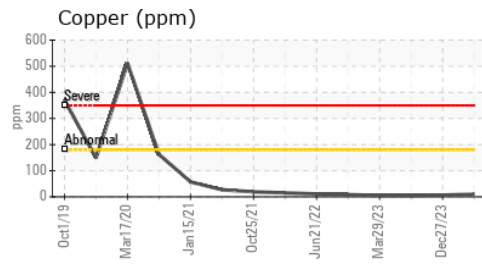
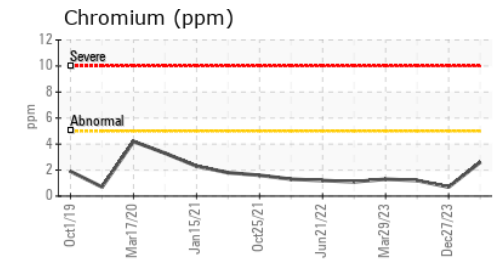
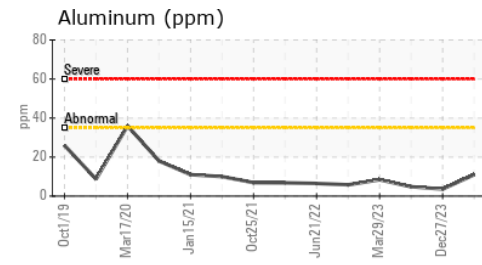
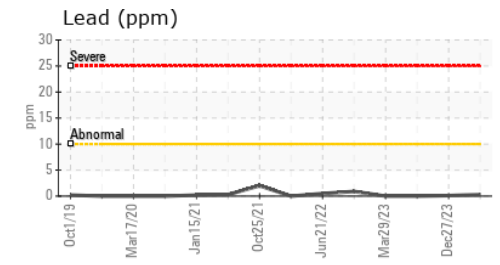
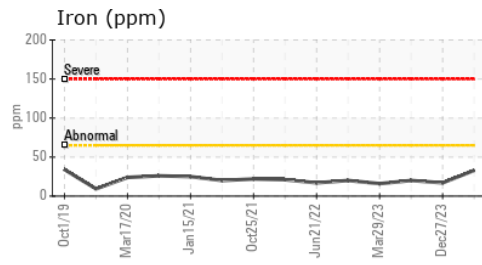
OIL ANALYSIS REPORT



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	11.9	12.3	12.1

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0851780
Lab Number : 06196871
Unique Number : 11058994
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)