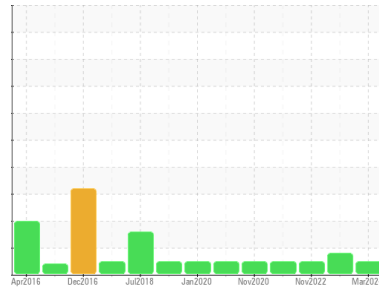




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
2016 FREIGHTLINER 3833
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (40 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		WC0877325	WC0625659	WC0625621
Sample Date	Client Info		22 Mar 2024	29 Feb 2024	30 Nov 2022
Machine Age	mls	Client Info	135870	0	324389
Oil Age	mls	Client Info	0	36788	50000
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			NORMAL	ABNORMAL	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	18	▲ 94	36
Chromium	ppm	ASTM D5185m	>5	<1	3	2
Nickel	ppm	ASTM D5185m	>3	<1	1	0
Titanium	ppm	ASTM D5185m	>5	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>35	6	21	11
Lead	ppm	ASTM D5185m	>10	<1	<1	0
Copper	ppm	ASTM D5185m	>180	5	22	7
Tin	ppm	ASTM D5185m	>8	<1	<1	<1
Antimony	ppm	ASTM D5185m	>35	---	---	---
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		<1	<1	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		81	20	21
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	8	20
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		696	717	644
Calcium	ppm	ASTM D5185m	2900	1310	1429	1527
Phosphorus	ppm	ASTM D5185m	1100	749	736	741
Zinc	ppm	ASTM D5185m	1200	821	882	891
Sulfur	ppm	ASTM D5185m	4000	3532	3146	3772

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	6	8	4
Sodium	ppm	ASTM D5185m		1	4	2
Potassium	ppm	ASTM D5185m	>20	6	11	10

INFRA-RED

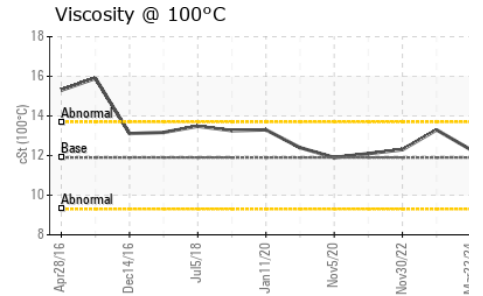
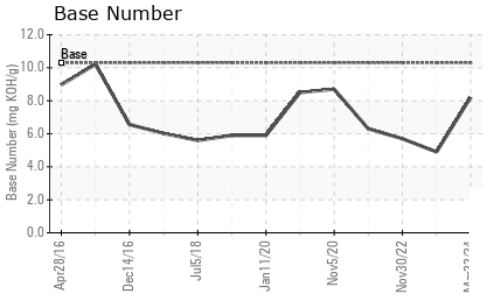
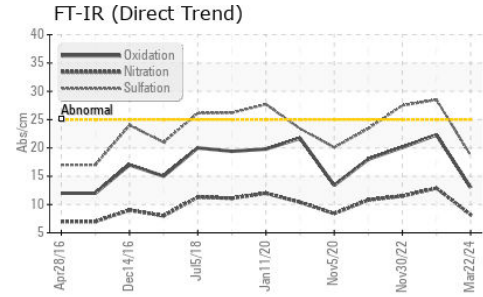
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.5	2.3	1.6
Nitration	Abs/cm	*ASTM D7624	>20	8.2	12.9	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	28.5	27.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	22.3	20.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	8.2	4.9	5.7



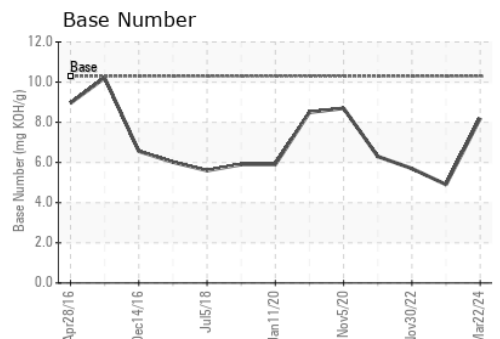
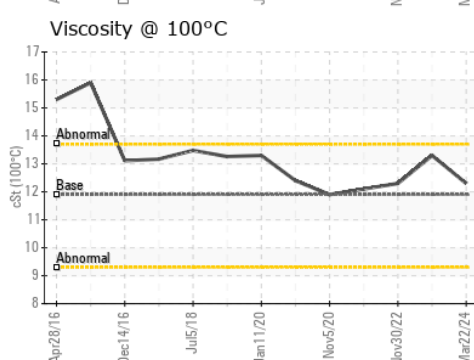
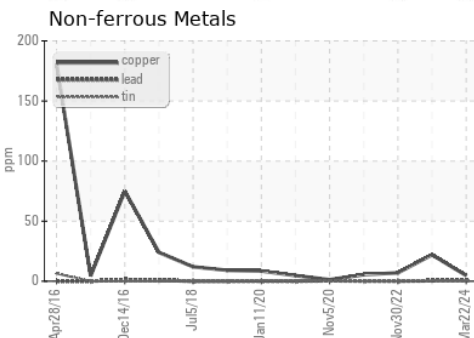
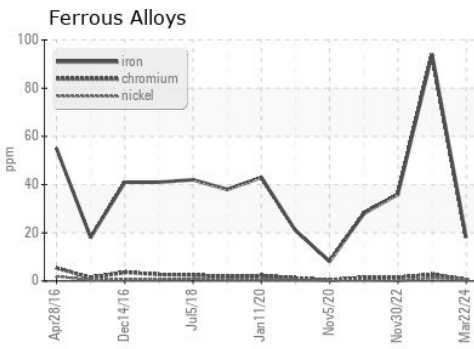
OIL ANALYSIS REPORT



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	13.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0877325
Lab Number : **06181099**
Unique Number : 11032425
Test Package : FLEET

LTI/MILKY WAY - MOUNT VERNON
 3814 OLD HWY 99 S RD
 MOUNT VERNON, WA
 US 98273
 Contact: JOHN VAN WINGERDEN

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)

jvw@lynden.com
 T: (360)354-2101
 F: (360)354-3571