



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 7139

Component
Diesel Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (48 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0908133	WC0908162	WC0881487
Sample Date		Client Info		09 May 2024	08 Feb 2024	20 Nov 2023
Machine Age	mls	Client Info		587474	577195	563795
Oil Age	mls	Client Info		25000	25000	25000
Filter Age	mls	Client Info		25000	25000	25000
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	19	12	16
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	5	9
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	0	1	4
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

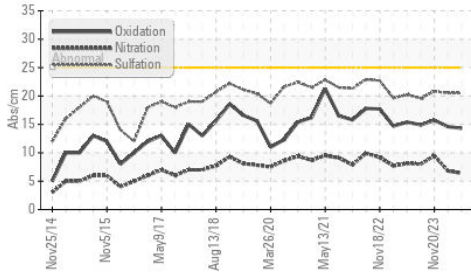
Silicon	ppm	ASTM D5185m	>20	5	4	5
Potassium	ppm	ASTM D5185m	>20	9	42	268
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.4	6.8	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	20.5	20.8
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

FLUID CONDITION

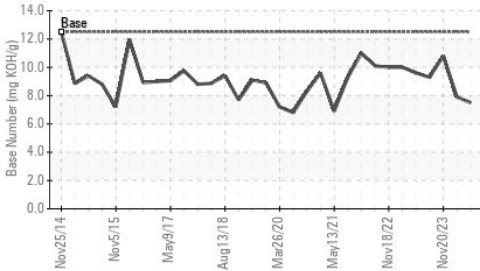
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		15	63	426
Boron	ppm	ASTM D5185m	151	431	297	7
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	83	82	69
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	409	642	901
Calcium	ppm	ASTM D5185m	2046	1316	1483	1013
Phosphorus	ppm	ASTM D5185m	1043	1066	1212	1078
Zinc	ppm	ASTM D5185m	943	1219	1520	1225
Sulfur	ppm	ASTM D5185m	5012	3649	3981	3203
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	14.6	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	7.5	7.9	10.8
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.6	13.9

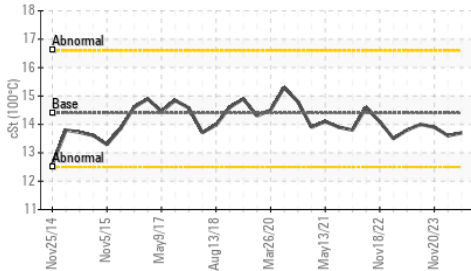
FT-IR (Direct Trend)



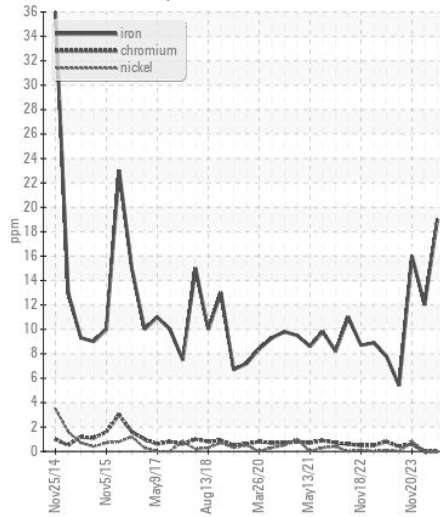
Base Number



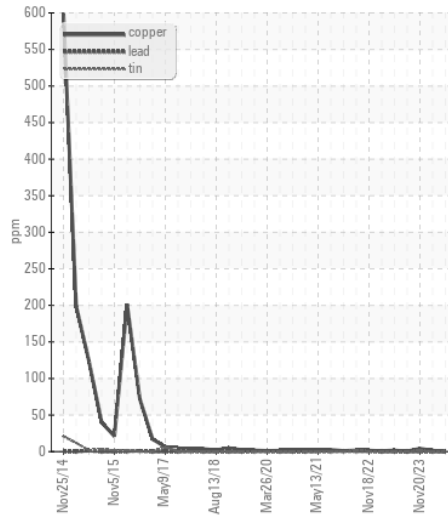
Viscosity @ 100°C



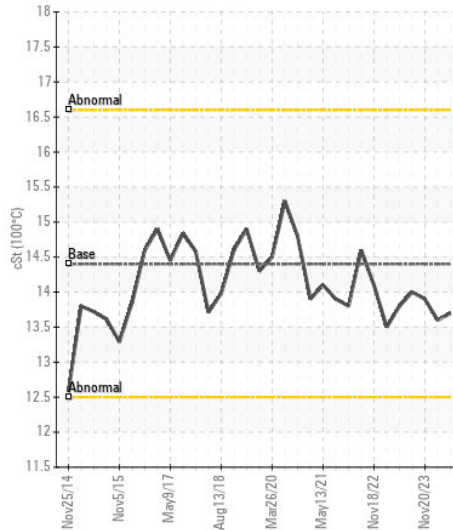
Ferrous Alloys



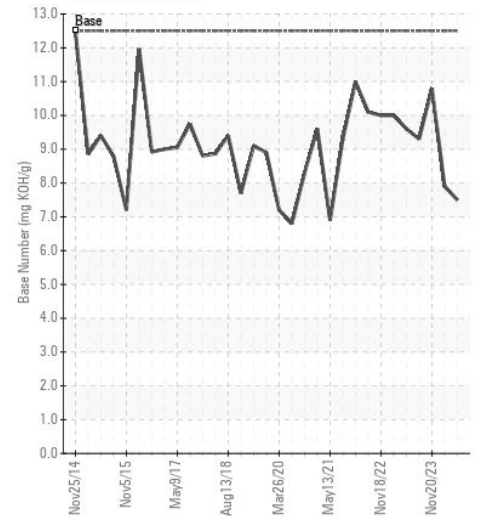
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0908133
Lab Number : 06187138
Unique Number : 11043890
Test Package : FLEET

Received : 21 May 2024
Tested : 23 May 2024
Diagnosed : 23 May 2024 - Sean Felton

SALEM NATIONALEASE CORPORATION
 198 PARK PLAZA DRIVE
 WINSTON SALEM, NC
 US 27105

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F: x:

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)