TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 208
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (20 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

WEAR

All component wear rates are normal.

CONTAMINATION

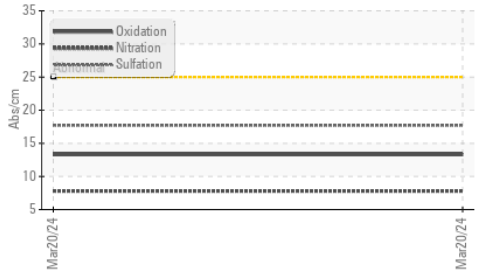
There is no indication of any contamination in the oil.

FLUID CONDITION

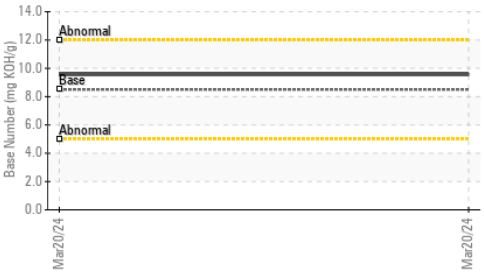
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02626602	---	---
Sample Date		Client Info		20 Mar 2024	---	---
Machine Age	hrs	Client Info		14330	---	---
Oil Age	hrs	Client Info		800	---	---
Filter Age	hrs	Client Info		400	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---
Iron	ppm	ASTM D5185(m)	>75	4	---	---
Chromium	ppm	ASTM D5185(m)	>5	0	---	---
Nickel	ppm	ASTM D5185(m)	>4	0	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>15	2	---	---
Lead	ppm	ASTM D5185(m)	>25	0	---	---
Copper	ppm	ASTM D5185(m)	>100	<1	---	---
Tin	ppm	ASTM D5185(m)	>4	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Silicon	ppm	ASTM D5185(m)	>25	8	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	7.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.7	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)	>216	3	---	---
Boron	ppm	ASTM D5185(m)	250	62	---	---
Barium	ppm	ASTM D5185(m)	10	0	---	---
Molybdenum	ppm	ASTM D5185(m)	100	82	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	450	29	---	---
Calcium	ppm	ASTM D5185(m)	3000	2144	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	1013	---	---
Zinc	ppm	ASTM D5185(m)	1350	1146	---	---
Sulfur	ppm	ASTM D5185(m)	4250	3171	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	9.56	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.9	---	---

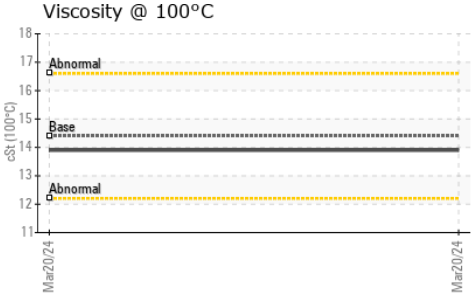
FT-IR (Direct Trend)



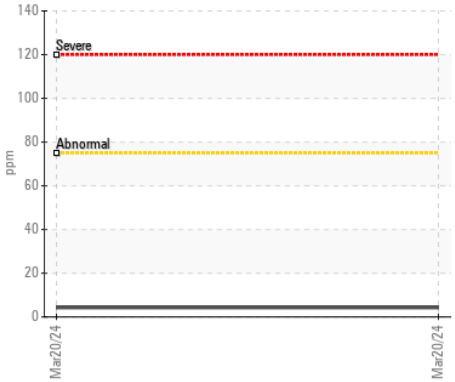
Base Number



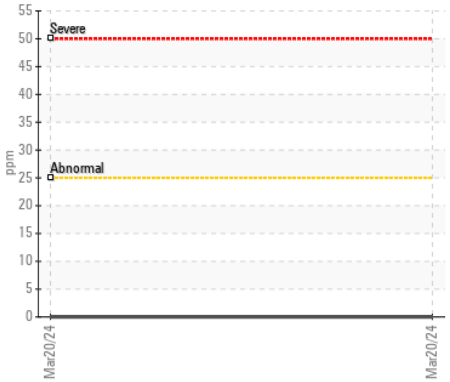
Viscosity @ 100°C



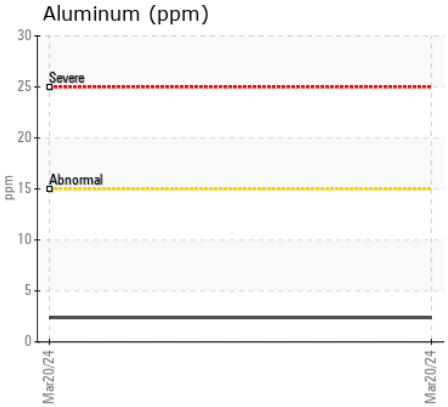
Iron (ppm)



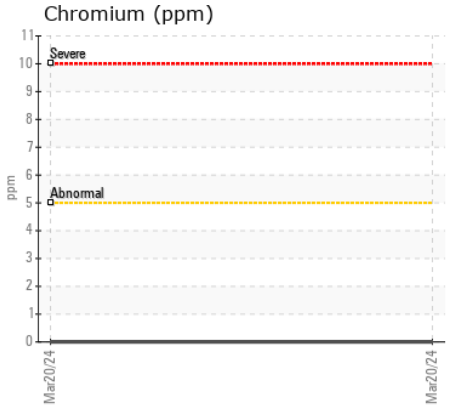
Lead (ppm)



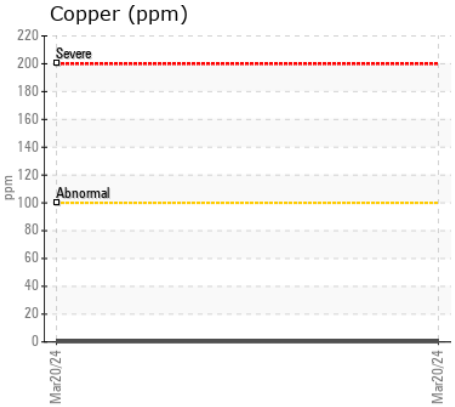
Aluminum (ppm)



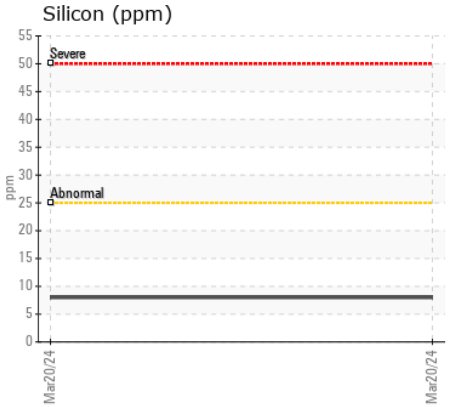
Chromium (ppm)



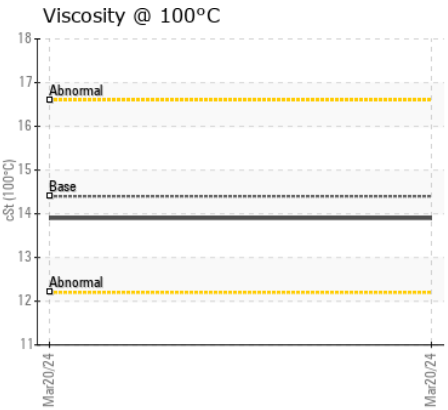
Copper (ppm)



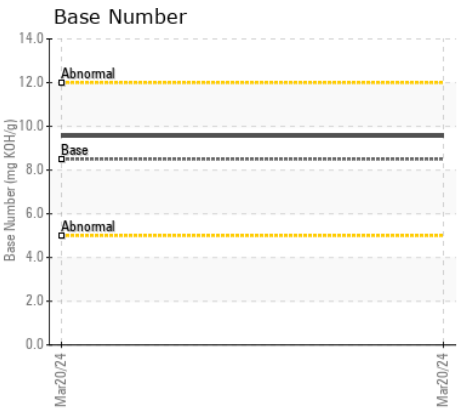
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9		
Sample No.	: TR02626602	**Received**	: 04 Apr 2024
Lab Number	: 02626602	**Tested**	: 05 Apr 2024
Unique Number	: 5759734	**Diagnosed**	: 05 Apr 2024 - Wes Davis
Test Package	: MOB 2		

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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)

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