**WEAR** CONTAMINATION **FLUID CONDITION** 

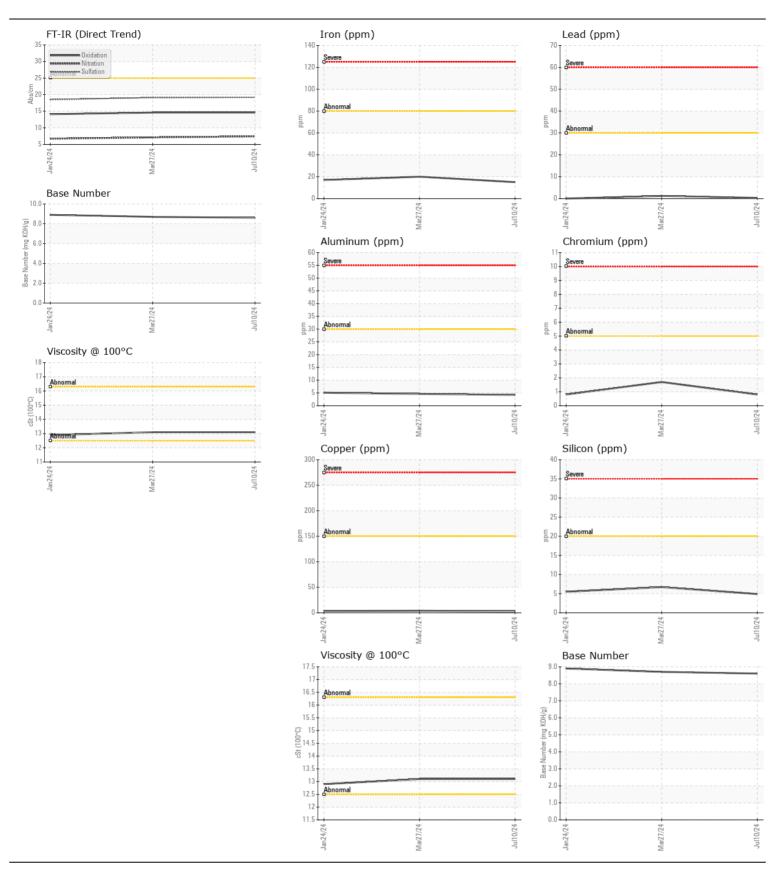
**NORMAL NORMAL NORMAL** 

Machine Id

## FREIGHTLINER 1241

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0917196	WC0917324	WC089385
	Sample Date		Client Info		10 Jul 2024	27 Mar 2024	24 Jan 202
	Machine Age	mls	Client Info		122727	112084	100294
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	nnm	ASTM D5185m	- QN	15	20	17
WEAR	Chromium	ppm	ASTM D5185m		15   <1	2	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	1	0
	Titanium	ppm	ASTM D5185m	>2	<1	<1	0
	Silver		ASTM D5185m	~3	<1	<1	0
	Aluminum	ppm	ASTM D5185m		4	5	5
	Lead	ppm	ASTM D5185m		<1	1	0
	Copper	ppm	ASTM D5185m		3	4	4
	Tin	ppm	ASTM D5185m		<1	1	0
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		5	7	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		6	8	6
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol	21	WC Method	0	NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.4	0.4	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.1	6.7
	Sulfation Silt	Abs/.1mm	*ASTM D7415		19.2 NONE	19.1	18.5 NONE
	Debris	scalar	*Visual	NONE	NONE	NONE NONE	NONE
	Sand/Dirt	scalar scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	0	<1	1
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		4	<1	5
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		61	58	60
	Manganese	ppm	ASTM D5185m		<1	1	<1
	Magnesium	ppm	ASTM D5185m		943	913	945
	Calcium	ppm	ASTM D5185m		1177	1072	1056
	Phosphorus	ppm	ASTM D5185m		1073	1086	1053
	Zinc	ppm	ASTM D5185m		1263	1215	1237
	Sulfur	ppm	ASTM D5185m		2854	3391	2879
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	14.6	14.1
	Base Number (BN)				8.6	8.7	8.9
	Visc @ 100°C	cSt	ASTM D445		13.1	13.1	12.9





Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06232995 Unique Number : 11116488

: WC0917196 Received **Tested** 

: 11 Jul 2024 Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

: 11 Jul 2024 : 11 Jul 2024 - Wes Davis

**CONCRETE SERVICE CO - FAY BLOCK** 161 BUILDERS BLVD FAYETTEVILLE, NC

US 28301 Contact: BRYAN VANNIMAN

To discuss this sample report, contact Customer Service at 1-800-237-1369. bryanvanniman@fayblock.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (800)326-9198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)