



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
WESTERN STAR R-744
Component
Diesel Engine
Fluid
SAE 15W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0081827	---	---
Sample Date		Client Info		16 May 2024	---	---
Machine Age	kms	Client Info		27423	---	---
Oil Age	kms	Client Info		27423	---	---
Filter Age	kms	Client Info		27423	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

Metal levels are typical for a components first oil change.

Iron	ppm	ASTM D5185(m)	>100	24	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	7	---	---
Lead	ppm	ASTM D5185(m)	>40	10	---	---
Copper	ppm	ASTM D5185(m)	>330	360	---	---
Tin	ppm	ASTM D5185(m)	>15	6	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	VLITE	---	---

CONTAMINATION

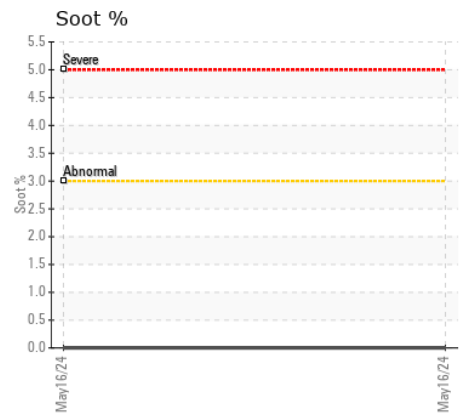
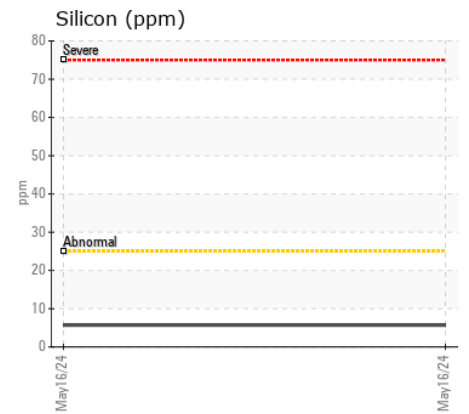
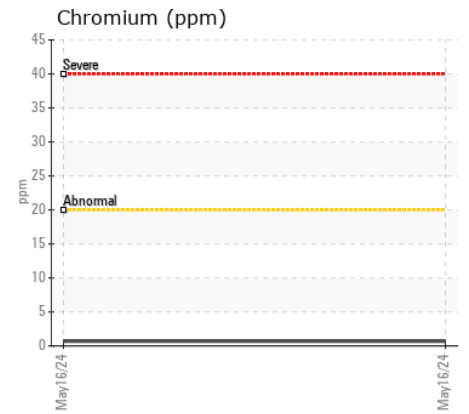
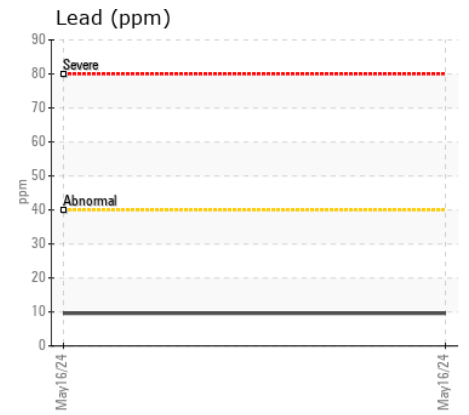
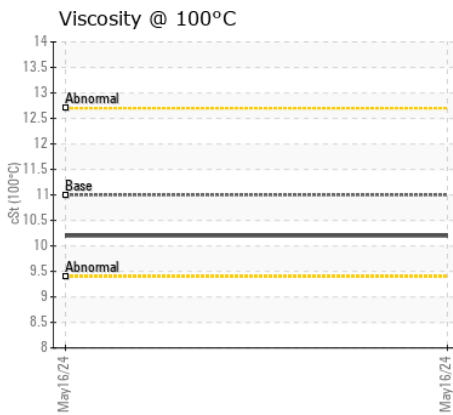
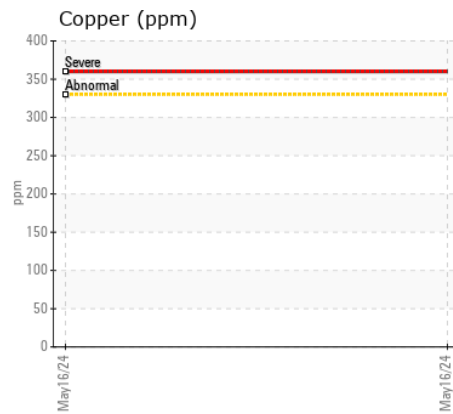
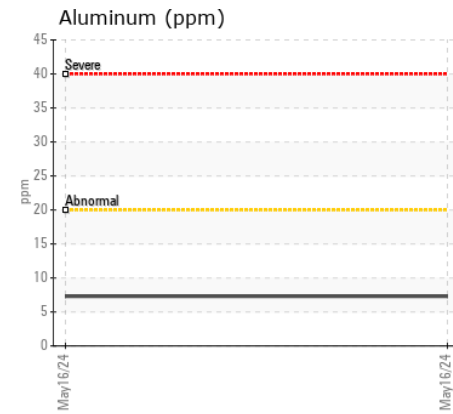
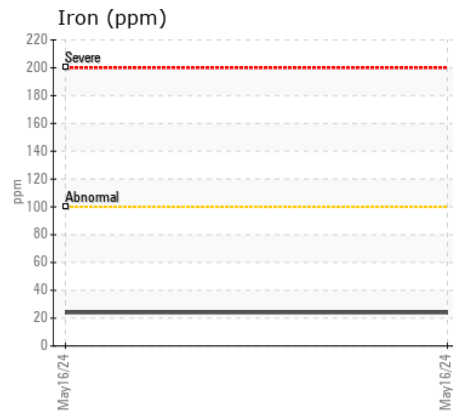
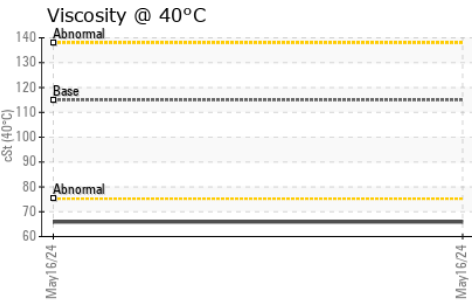
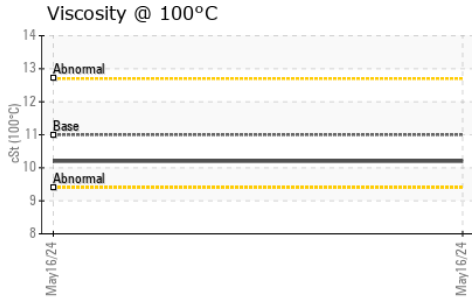
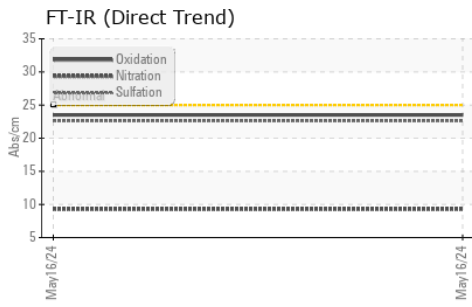
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	---	---
Potassium	ppm	ASTM D5185(m)	>20	17	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>70	4	---	---
Boron	ppm	ASTM D5185(m)		35	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		42	---	---
Manganese	ppm	ASTM D5185(m)		2	---	---
Magnesium	ppm	ASTM D5185(m)		541	---	---
Calcium	ppm	ASTM D5185(m)		1697	---	---
Phosphorus	ppm	ASTM D5185(m)		738	---	---
Zinc	ppm	ASTM D5185(m)		871	---	---
Sulfur	ppm	ASTM D5185(m)		1697	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.5	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	115	65.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	10.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	74	140	---	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : PC0081827

Lab Number : 02636277

Unique Number : 5785439

Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 17 May 2024

Tested : 17 May 2024

Diagnosed : 21 May 2024 - Kevin Marson

RENEWABLE FOREST PRODUCTS

59 TWIN CITY CROSS RD

ROSSLYN, ON

CA P7C 5M9

Contact: Service Manager
purchasing@renewablefp.com

T: (807)939-1182

F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.