



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
WESTERN STAR 505
Component
Front Diesel Engine
Fluid
SERVICE PRO 15W40 SYN BLEND (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005404	RW0004773	RW0004767
Sample Date		Client Info		05 Apr 2024	12 Feb 2024	22 Dec 2023
Machine Age	mls	Client Info		841261	829327	816853
Oil Age	mls	Client Info		11934	10474	11787
Filter Age	mls	Client Info		11934	10474	11787
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	48	51	54
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	4
Lead	ppm	ASTM D5185m	>150	7	6	3
Copper	ppm	ASTM D5185m	>90	0	<1	1
Tin	ppm	ASTM D5185m	>5	1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

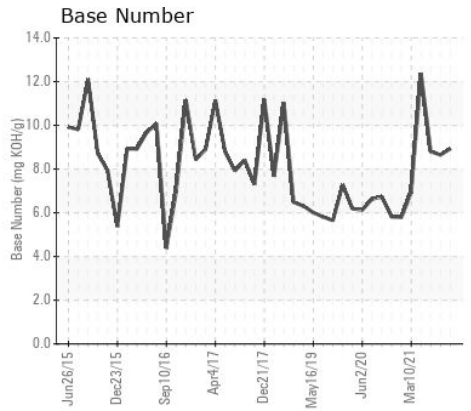
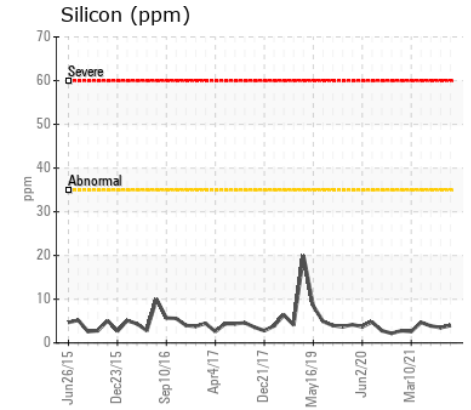
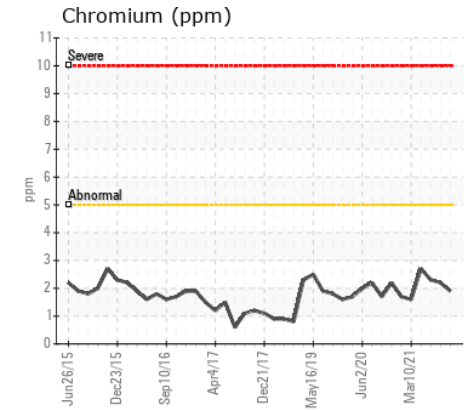
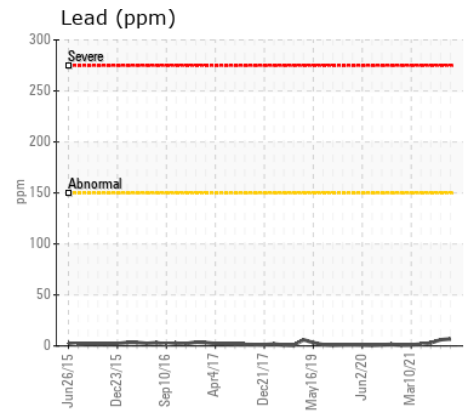
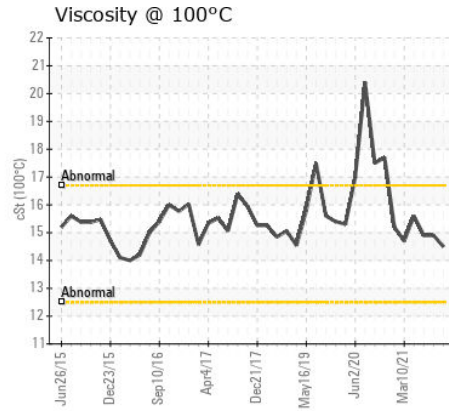
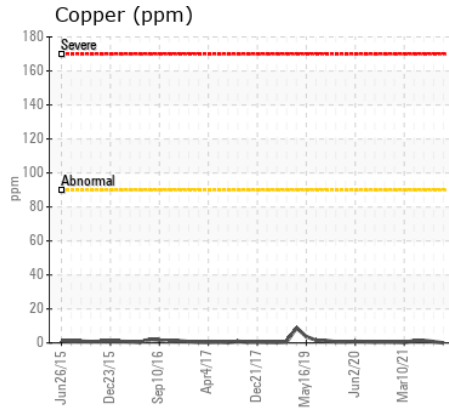
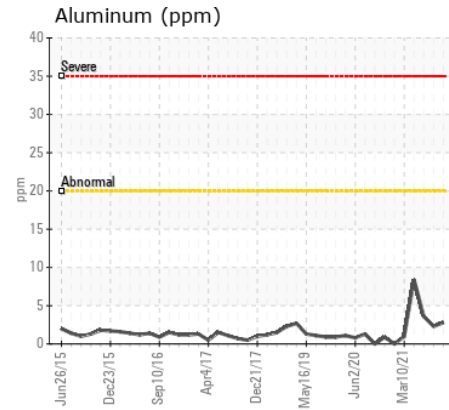
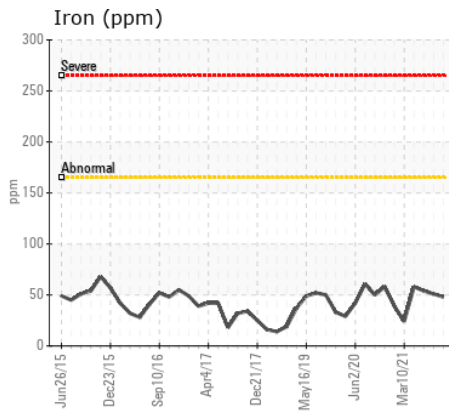
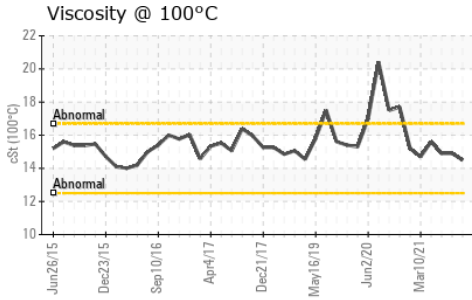
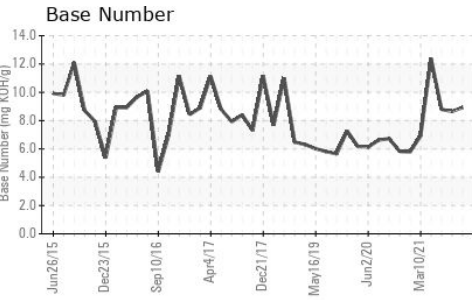
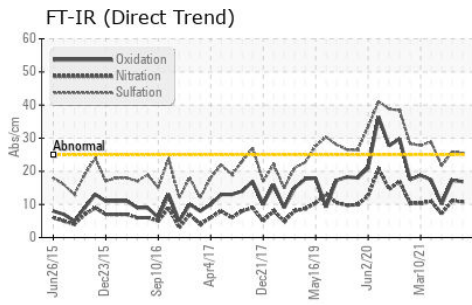
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	4	4	4
Potassium	ppm	ASTM D5185m	>20	1	<1	2
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
Soot %	%	*ASTM D7844	>7.5	3.3	3.5	3.1
Nitration	Abs/cm	*ASTM D7624	>20	10.8	11.1	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	25.9	21.6
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		4	3	3
Boron	ppm	ASTM D5185m		9	15	21
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	52	46
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		906	825	739
Calcium	ppm	ASTM D5185m		1116	1256	1365
Phosphorus	ppm	ASTM D5185m		1029	980	1004
Zinc	ppm	ASTM D5185m		1228	1242	1256
Sulfur	ppm	ASTM D5185m		3301	2831	3008
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	17.3	10.1
Base Number (BN)	mg KOH/g	ASTM D2896		8.93	8.65	8.79
Visc @ 100°C	cSt	ASTM D445		14.5	14.9	14.9



Certificate L2367

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

Sample No. : RW0005404

Lab Number : 06157103

Unique Number : 10992526

Test Package : MOB 2

Received : 22 Apr 2024

Tested : 23 Apr 2024

Diagnosed : 23 Apr 2024 - Wes Davis

MICHIGAN WOOD CARRIERS

P.O. BOX 337

VANDERBILT, MI

US 49795

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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)