



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
113528
Component
Diesel Engine
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0033039	IL0032746	IL0027689
Sample Date		Client Info		16 May 2024	12 Oct 2023	08 Dec 2022
Machine Age	mls	Client Info		101915	73269	36078
Oil Age	mls	Client Info		28646	37193	36078
Filter Age	mls	Client Info		28646	37193	36078
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	35	64
Chromium	ppm	ASTM D5185m	>20	2	1	3
Nickel	ppm	ASTM D5185m	>4	<1	<1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	1	0	1
Aluminum	ppm	ASTM D5185m	>20	4	8	25
Lead	ppm	ASTM D5185m	>40	1	3	1
Copper	ppm	ASTM D5185m	>330	14	43	113
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

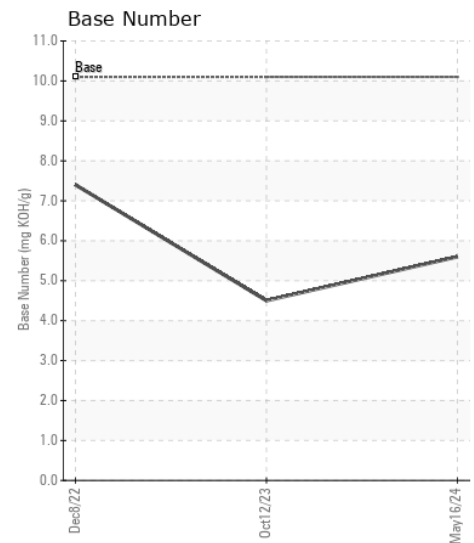
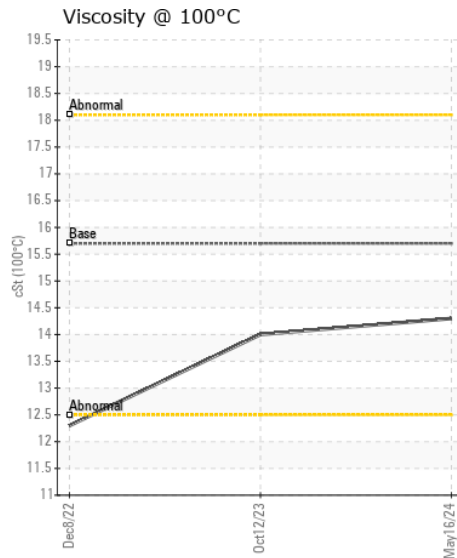
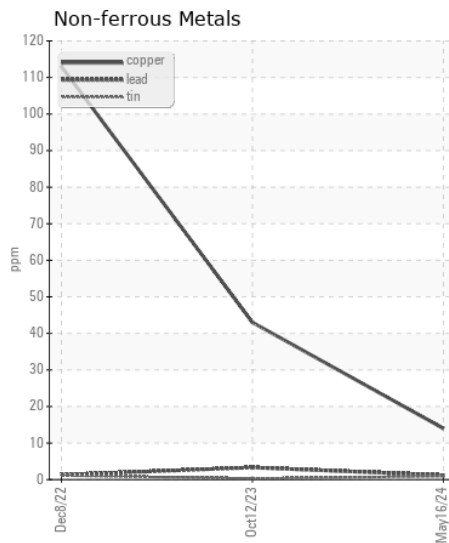
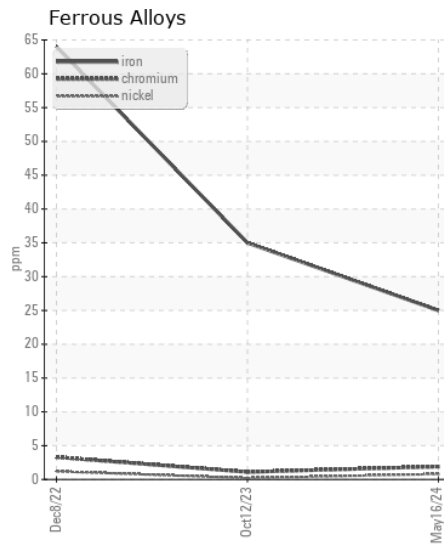
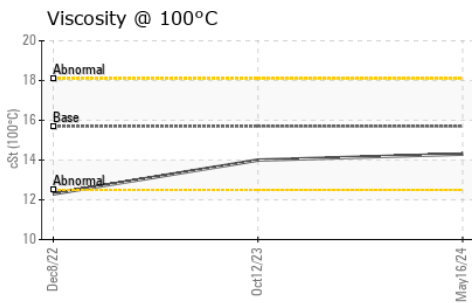
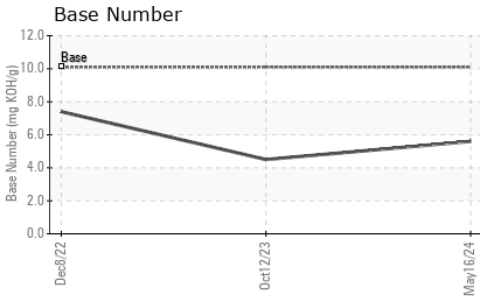
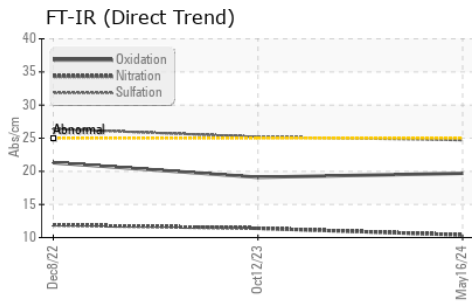
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	10	15
Potassium	ppm	ASTM D5185m	>20	12	21	76
Fuel		WC Method	>5	<1.0	<1.0	0.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.2	1.5	1.5
Nitration	Abs/cm	*ASTM D7624	>20	10.4	11.4	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	25.2	26.4
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		3	<1	5
Boron	ppm	ASTM D5185m	316	28	10	22
Barium	ppm	ASTM D5185m	0.0	1	0	1
Molybdenum	ppm	ASTM D5185m	1.2	37	83	72
Manganese	ppm	ASTM D5185m		1	<1	4
Magnesium	ppm	ASTM D5185m	24	240	61	389
Calcium	ppm	ASTM D5185m	2292	1967	2018	1957
Phosphorus	ppm	ASTM D5185m	1064	911	911	1050
Zinc	ppm	ASTM D5185m	1160	1176	1095	1324
Sulfur	ppm	ASTM D5185m	4996	3280	3040	3340
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	19.1	21.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	5.6	4.5	7.4
Visc @ 100°C	cSt	ASTM D445	15.7	14.3	14.0	12.3



Certificate L2367

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

Sample No. : IL0033039

Lab Number : 06191837

Unique Number : 11048589

Test Package : FLEET

Received : 28 May 2024

Tested : 29 May 2024

Diagnosed : 29 May 2024 - Wes Davis

IDEALISE OF NORTHWEST WI

611 HANSEN ROAD

GREEN BAY, WI

US 54304

Contact: GARY KOLTZ

gkoltz@pcitrucks.com

T: (920)499-6200

F: (920)499-5332

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)