



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
116342
 Component
Diesel Engine
 Fluid
SHELL ROTELLA T 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0033036	IL0033097	IL0027483
Sample Date		Client Info		20 May 2024	19 Dec 2023	06 Jul 2023
Machine Age	mls	Client Info		109474	75954	43025
Oil Age	mls	Client Info		33520	32929	43025
Filter Age	mls	Client Info		33520	32929	43025
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	>100	25	31	64
Chromium	ppm	ASTM D5185m	>20	2	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	1	0	0
Aluminum	ppm	ASTM D5185m	>20	8	6	9
Lead	ppm	ASTM D5185m	>40	<1	2	4
Copper	ppm	ASTM D5185m	>330	20	50	128
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

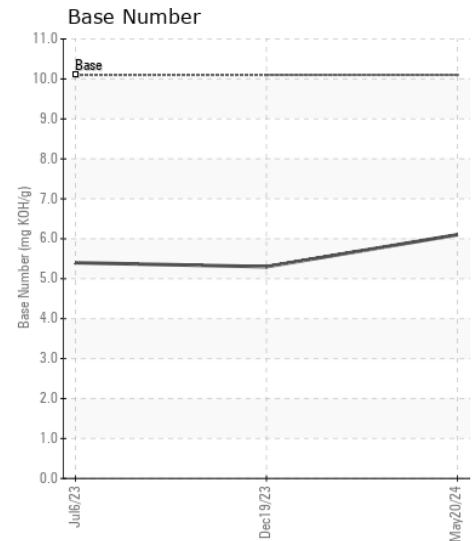
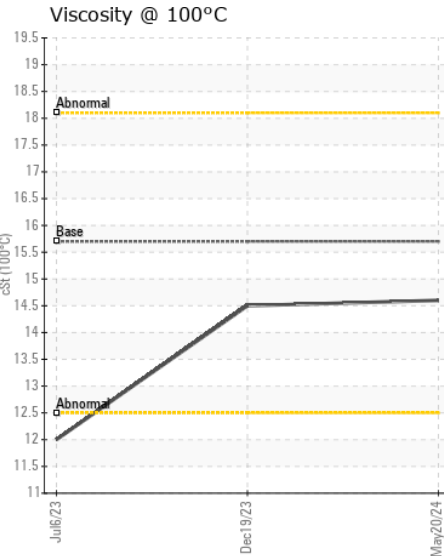
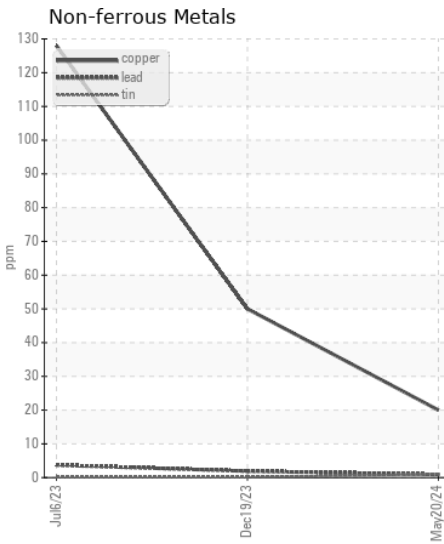
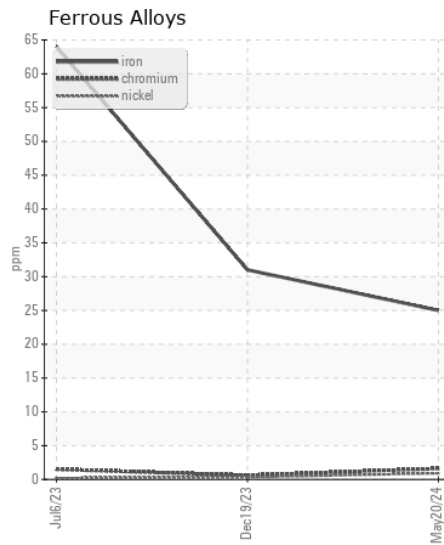
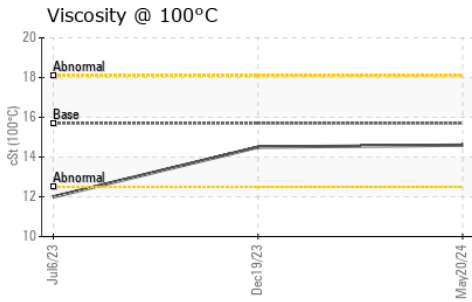
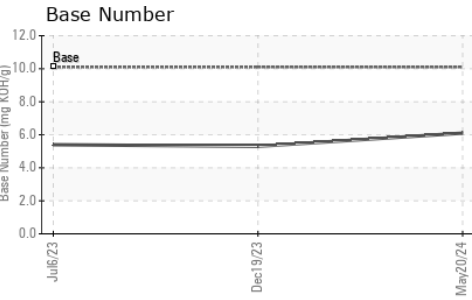
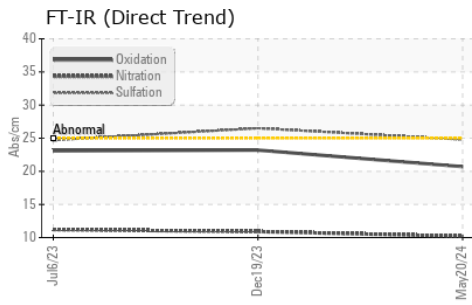
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	8	14
Potassium	ppm	ASTM D5185m	>20	10	15	24
Fuel		WC Method	>5	<1.0	<1.0	0.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.1	1.3	1.3
Nitration	Abs/cm	*ASTM D7624	>20	10.2	10.9	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.8	26.5	24.7
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	1	4
Boron	ppm	ASTM D5185m	316	40	29	2
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	1.2	26	33	72
Manganese	ppm	ASTM D5185m		1	<1	5
Magnesium	ppm	ASTM D5185m	24	241	247	394
Calcium	ppm	ASTM D5185m	2292	1971	2041	2093
Phosphorus	ppm	ASTM D5185m	1064	907	943	1026
Zinc	ppm	ASTM D5185m	1160	1196	1218	1354
Sulfur	ppm	ASTM D5185m	4996	2939	3080	3274
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	23.2	23.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.1	5.3	5.4
Visc @ 100°C	cSt	ASTM D445	15.7	14.6	14.5	12.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0033036
Lab Number : 06191841
Unique Number : 11048593
Test Package : FLEET

Received : 28 May 2024
Tested : 29 May 2024
Diagnosed : 30 May 2024 - Sean Felton

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)