



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 102235
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		IL0032941	IL0032989	IL0032799
Sample Date		Client Info		18 Jun 2024	14 Mar 2024	04 Dec 2023
Machine Age	mls	Client Info		298764	282277	267420
Oil Age	mls	Client Info		16487	14857	15416
Filter Age	mls	Client Info		16487	14857	15416
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	>130	17	21	16
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	10	15	8
Lead	ppm	ASTM D5185m	>20	0	0	<1
Copper	ppm	ASTM D5185m	>125	<1	1	<1
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

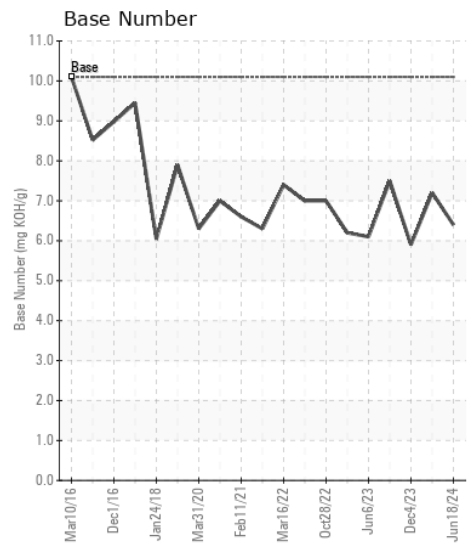
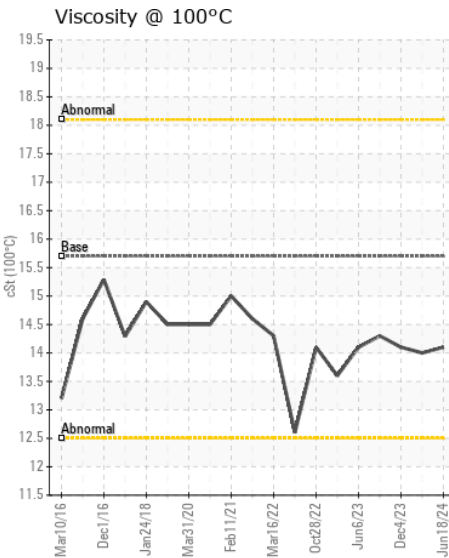
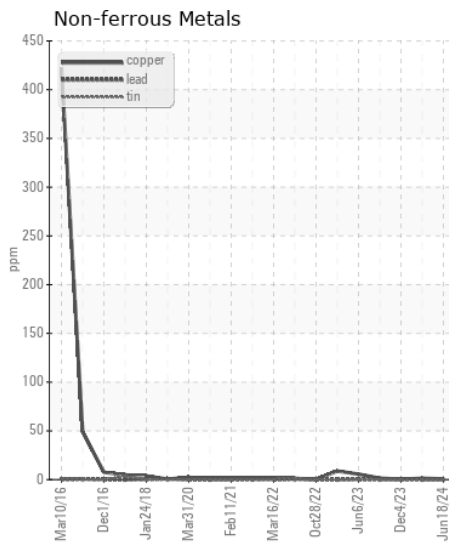
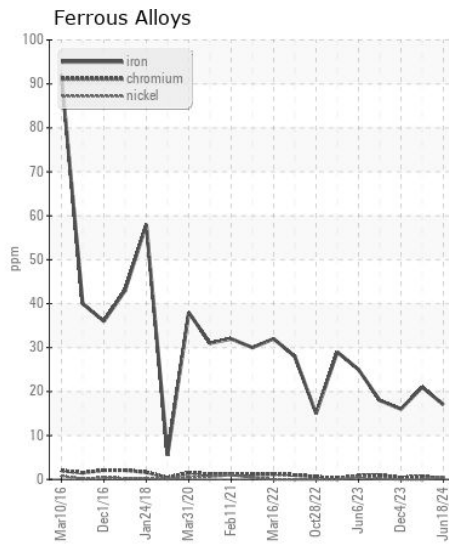
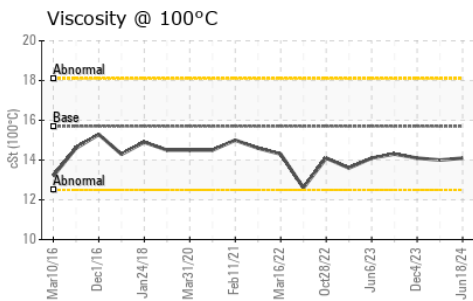
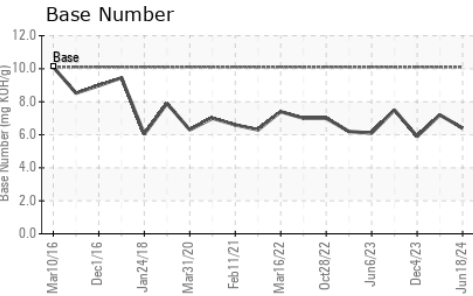
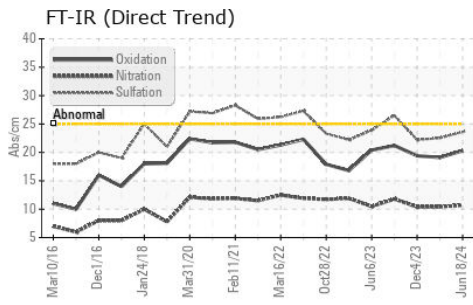
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	8	7	7
Potassium	ppm	ASTM D5185m	>20	14	15	10
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	>6	0.7	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.7	10.4	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	22.5	22.2
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	4	2
Boron	ppm	ASTM D5185m	316	61	83	45
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	21	29	46
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	24	244	285	440
Calcium	ppm	ASTM D5185m	2292	2239	2167	1808
Phosphorus	ppm	ASTM D5185m	1064	1109	1043	1103
Zinc	ppm	ASTM D5185m	1160	1387	1345	1311
Sulfur	ppm	ASTM D5185m	4996	4036	4024	3237
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	19.1	19.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.4	7.2	5.9
Visc @ 100°C	cSt	ASTM D445	15.7	14.1	14.0	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0032941
Lab Number : 06219349
Unique Number : 11097546
Test Package : FLEET

Received : 25 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldrige

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)