



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**114544**  
 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		<b>IL0033011</b>	IL0027453	IL0027609
Sample Date		Client Info		<b>22 Apr 2024</b>	17 Jul 2023	18 Jul 2022
Machine Age	mls	Client Info		<b>45312</b>	34375	17655
Oil Age	mls	Client Info		<b>10937</b>	16720	17655
Filter Age	mls	Client Info		<b>10937</b>	16720	17655
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	MARGINAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	<b>16</b>	37	64
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	27	38
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	4	15
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

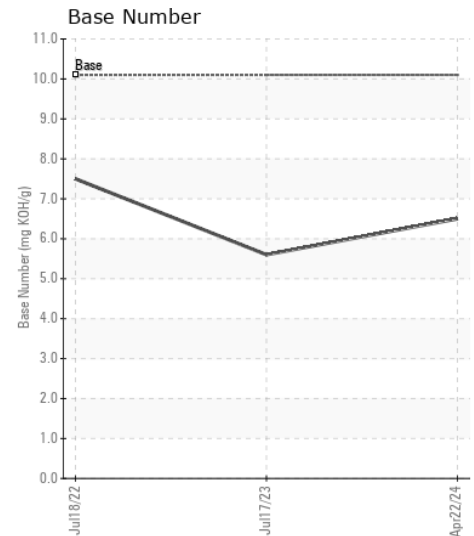
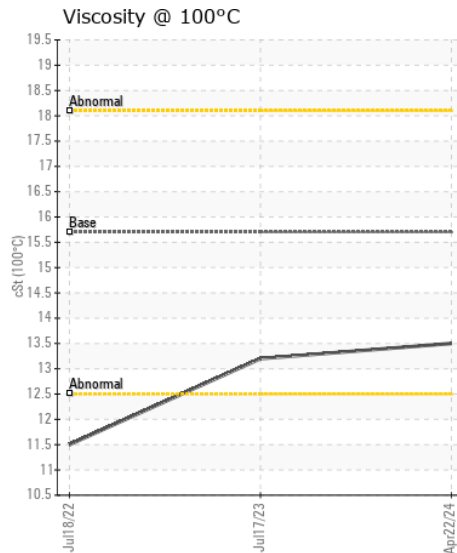
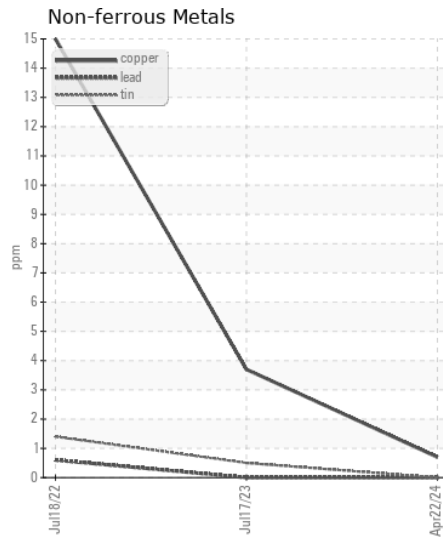
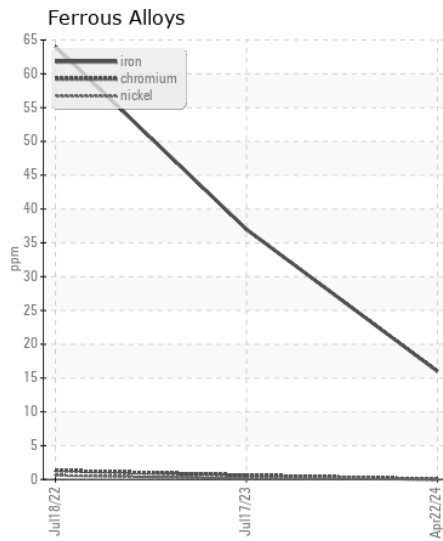
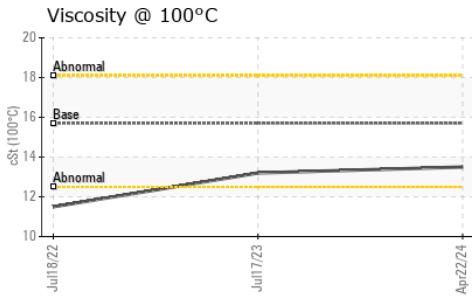
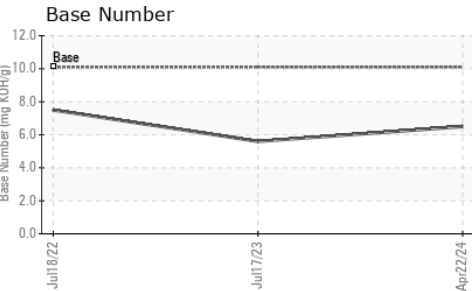
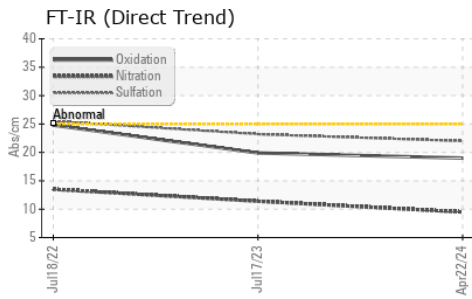
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	0	18
Potassium	ppm	ASTM D5185m	>20	<b>32</b>	64	105
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	▲ 2.6
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>6	<b>0.5</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	11.4	13.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	23.2	25.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>2</b>	<1	5
Boron	ppm	ASTM D5185m	316	<b>88</b>	32	34
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	3	4
Molybdenum	ppm	ASTM D5185m	1.2	<b>26</b>	84	50
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	5
Magnesium	ppm	ASTM D5185m	24	<b>156</b>	100	733
Calcium	ppm	ASTM D5185m	2292	<b>2194</b>	2038	1325
Phosphorus	ppm	ASTM D5185m	1064	<b>1021</b>	874	672
Zinc	ppm	ASTM D5185m	1160	<b>1250</b>	1084	873
Sulfur	ppm	ASTM D5185m	4996	<b>4093</b>	3542	2898
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.0</b>	19.9	24.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.5</b>	5.6	7.5
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.5</b>	13.2	11.5



Certificate L2367

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

**Sample No.** : IL0033011

**Lab Number** : 06160047

**Unique Number** : 10995470

**Test Package** : FLEET

**Received** : 25 Apr 2024

**Tested** : 26 Apr 2024

**Diagnosed** : 26 Apr 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)