



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

## Rotella T4 15w40 Tank

Component

New (Unused) Oil

Fluid

SHELL ROTELLA T4 15W40 (--- GAL)

### DIAGNOSIS

#### Recommendation

This is a baseline read-out on the submitted sample. ( Customer Sample Comment: Oil sample from tank )

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PE0002315</b>	---	---
Sample Date	Client Info			<b>21 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Chromium	ppm	ASTM D5185m		<b>0</b>	---	---
Nickel	ppm	ASTM D5185m		<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m		<b>0</b>	---	---
Tin	ppm	ASTM D5185m		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

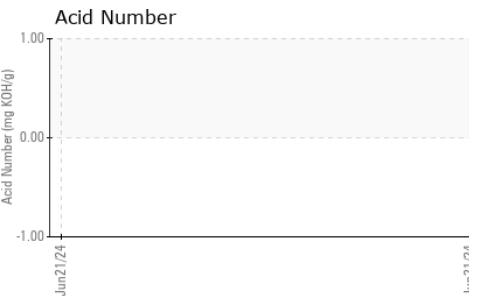
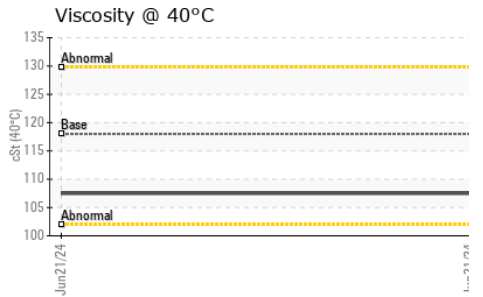
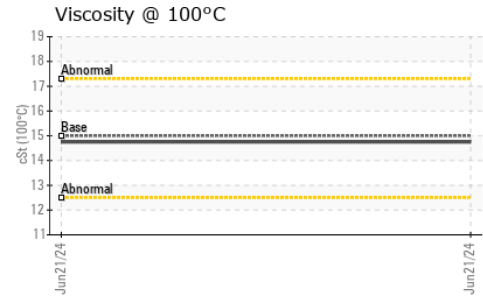
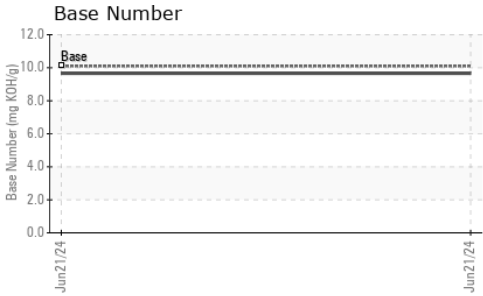
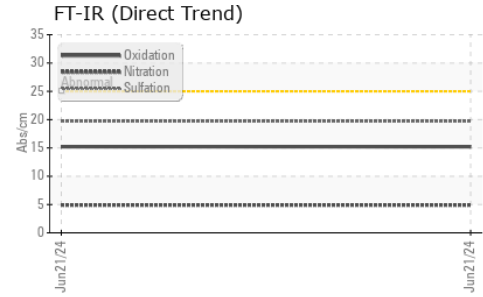
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>164</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>4</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>23</b>	---	---
Calcium	ppm	ASTM D5185m		<b>2437</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>1051</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1220</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>4482</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		<b>5</b>	---	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>7</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624		<b>4.9</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415		<b>19.7</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414		<b>15.2</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>9.66</b>	---	---

# OIL ANALYSIS REPORT



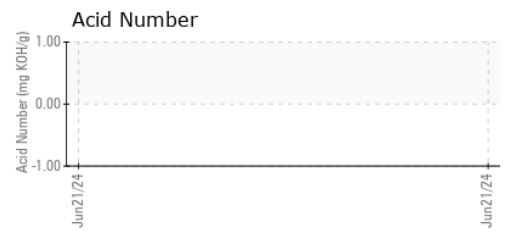
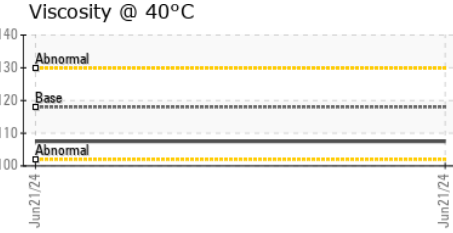
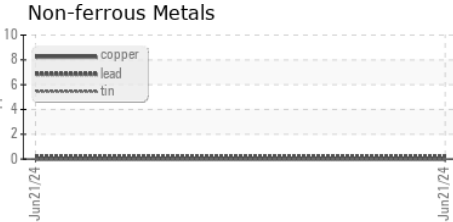
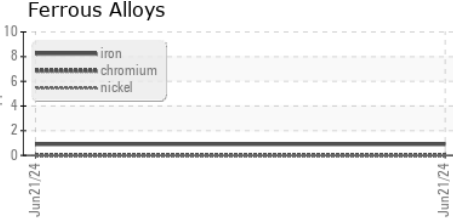
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	NEG	---	---	
Free Water	scalar	*Visual	NEG	---	---	

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	118	107.5	---	---
Visc @ 100°C	cSt	ASTM D445	15	14.75	---	---
Viscosity Index (VI)	Scale	ASTM D2270	133	141	---	---

### SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color					no image	no image
Bottom					no image	no image

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PE0002315      **Received** : 25 Jun 2024  
**Lab Number** : 06220260      **Tested** : 28 Jun 2024  
**Unique Number** : 11098457      **Diagnosed** : 28 Jun 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FT-IR, ICP, KV100, KV40, SCREEN, TAN Man, TBN, VI )

**BUCKS LOGGING**  
 2160 US-12  
 ETHEL, WA  
 US 98542

To discuss this sample report, contact Customer Service at 1-800-237-1369.      bucksloggingshop@gmail.com  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.      T: (360)520-3198  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)      F: