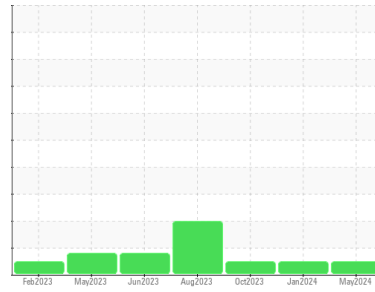




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**TS03-03**

Component

**Hydraulic System**

Fluid

**CHEVRON RANDO HD 32 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PH0000990</b>	PH0000989	PH0000988
Sample Date	Client Info			<b>24 May 2024</b>	15 Jan 2024	19 Oct 2023
Machine Age	days	Client Info		<b>0</b>	0	0
Oil Age	days	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>20	<b>3</b>	4	5
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

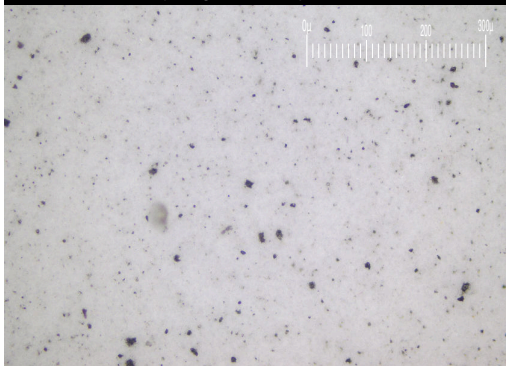
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>1</b>	<1	3
Calcium	ppm	ASTM D5185m		<b>51</b>	40	41
Phosphorus	ppm	ASTM D5185m		<b>362</b>	316	308
Zinc	ppm	ASTM D5185m		<b>471</b>	390	397
Sulfur	ppm	ASTM D5185m		<b>921</b>	688	766

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m		<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>491</b>	1042	1579
Particles >6µm		ASTM D7647	>2500	<b>152</b>	204	284
Particles >14µm		ASTM D7647	>320	<b>21</b>	23	19
Particles >21µm		ASTM D7647	>80	<b>7</b>	7	6
Particles >38µm		ASTM D7647	>20	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	<b>16/14/12</b>	17/15/12	18/15/11

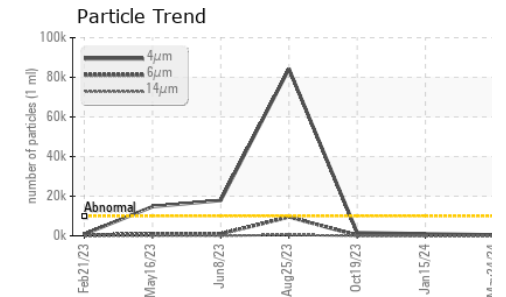
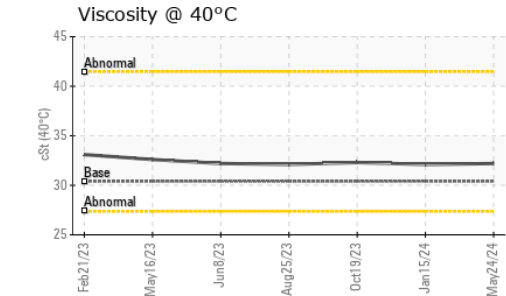
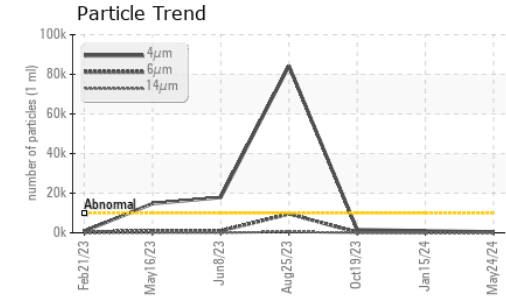
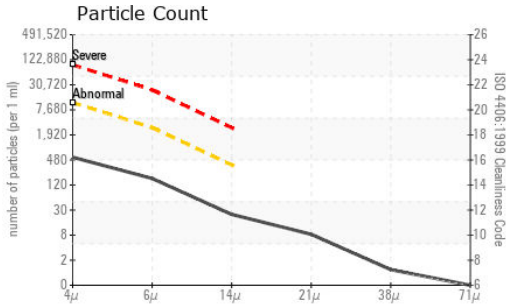
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.47</b>	0.34	0.42

Particle Filter (Magn: 200 x)





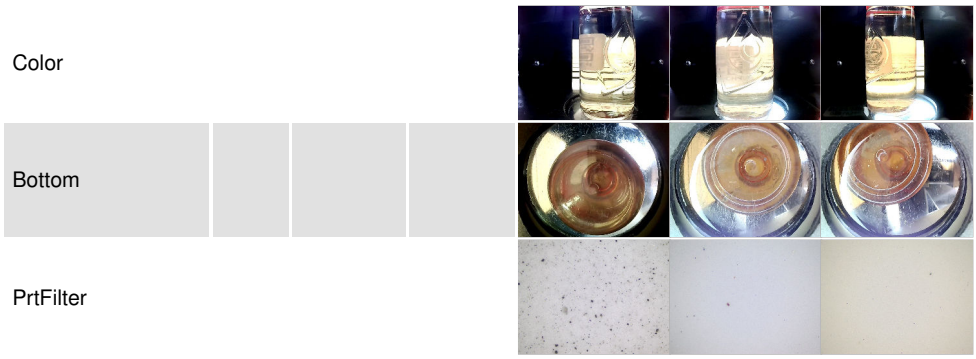
# OIL ANALYSIS REPORT



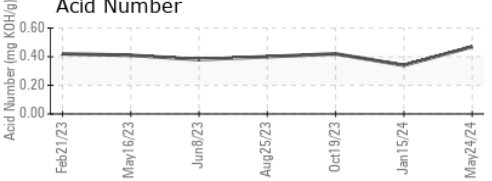
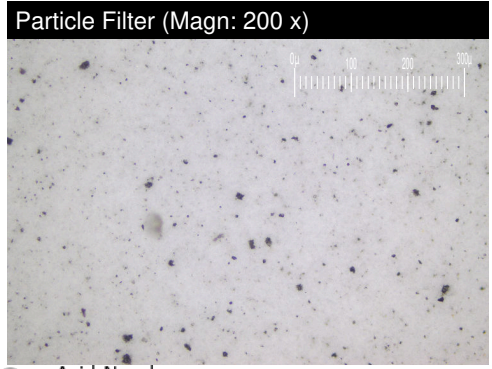
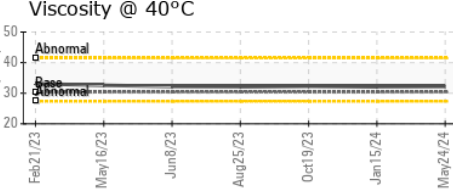
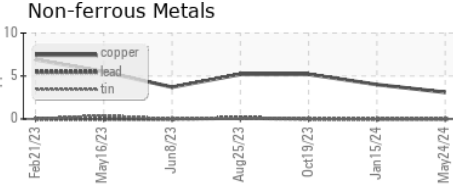
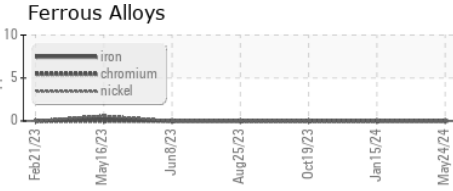
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	30.4	<b>32.2</b>	32.1	32.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PH0000990      **Received** : 31 May 2024  
**Lab Number** : **06196664**      **Tested** : 04 Jun 2024  
**Unique Number** : 11058787      **Diagnosed** : 04 Jun 2024 - Jonathan Hester  
**Test Package** : PLANT ( Additional Tests: PrtFilter )

**PARKER HANNIFIN - PLYMOUTH**  
 900 PLYMOUTH RD  
 PLYMOUTH, MI  
 US 48170  
 Contact: Helu Wodaje  
 Heletwork.Wodaje@parker.com

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)