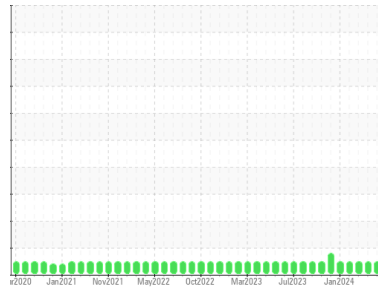




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area

**OIL**

Machine Id

**P-3160A (S/N WATER INJECTION PUMP)**

Component

**Pump**

Fluid

**CASTROL PERFECTO XPG 32 (35 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 fluid. 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 fluid is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>HLC0003305</b>	HLC0003133	HLC0003192
Sample Date	Client Info			<b>02 May 2024</b>	01 Apr 2024	04 Mar 2024
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	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		>.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>7	<b>0</b>	1	2
Lead	ppm	ASTM D5185m	>12	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185m	>30	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>9	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	<1

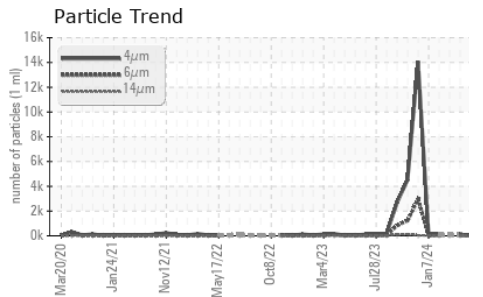
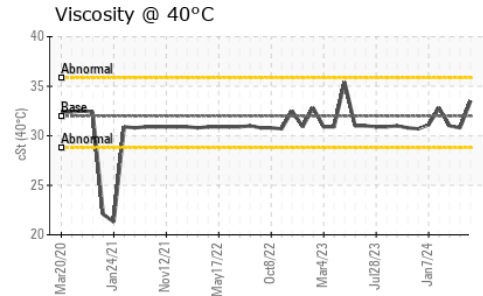
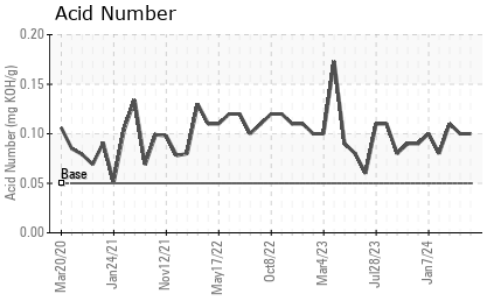
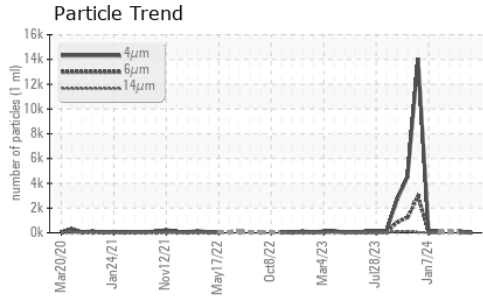
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m	0	<b>0</b>	4	3
Phosphorus	ppm	ASTM D5185m	25	<b>13</b>	25	21
Zinc	ppm	ASTM D5185m	0	<b>0</b>	2	0
Sulfur	ppm	ASTM D5185m	1500	<b>1671</b>	1502	1384

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>49</b>	102	---
Particles >6µm		ASTM D7647	>2500	<b>15</b>	42	---
Particles >14µm		ASTM D7647	>320	<b>1</b>	11	---
Particles >21µm		ASTM D7647	>80	<b>1</b>	4	---
Particles >38µm		ASTM D7647	>20	<b>0</b>	1	---
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/18/15	<b>13/11/7</b>	14/13/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.05	<b>0.10</b>	0.10	0.11

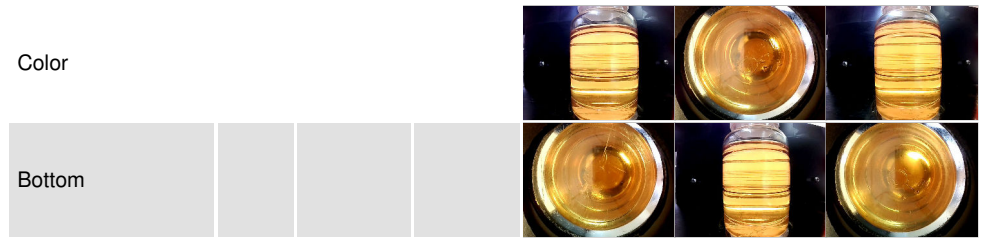
# OIL ANALYSIS REPORT



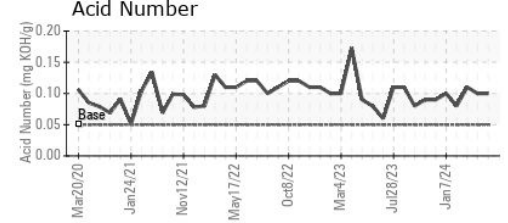
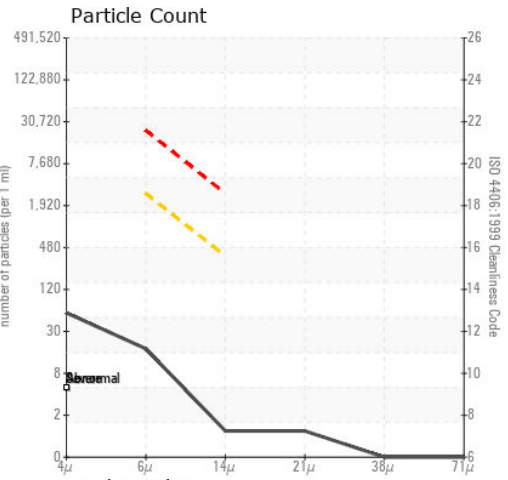
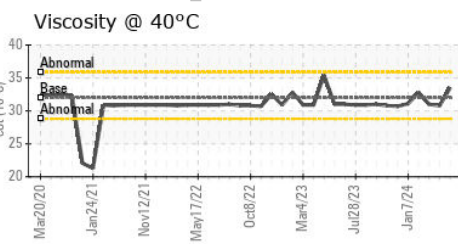
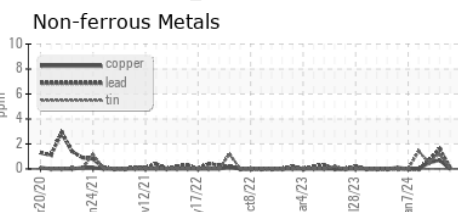
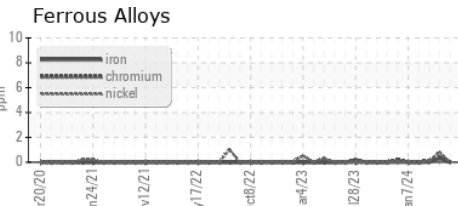
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.0	33.5	30.8

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HLC0003305      **Received** : 16 May 2024  
**Lab Number** : 06181980      **Tested** : 20 May 2024  
**Unique Number** : 11033306      **Diagnosed** : 20 May 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

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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)