



# OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION

Area  
**CARS**  
 Machine Id  
**CARS09JUNE23-230**  
 Component  
**Gearbox**  
 Fluid  
**XPDC 140 (--- GAL)**



## DIAGNOSIS

### Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### 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 at the top-end of the recommended limit.

## SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number	Client Info		<b>WC0577488</b>	---	---
Sample Date	Client Info		<b>09 Jun 2023</b>	---	---
Machine Age	mls	Client Info	<b>0</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >200	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >25	<b>0</b>	---	---
Lead	ppm	ASTM D5185m >50	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >200	<b>0</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<b>332</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m	<b>48</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>1227</b>	---	---
Zinc	ppm	ASTM D5185m	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>470</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >50	<b>1</b>	---	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---	---
Water	%	ASTM D6304 >0.2	<b>0.074</b>	---	---
ppm Water	ppm	ASTM D6304 >2000	<b>741.4</b>	---	---

## FLUID CLEANLINESS

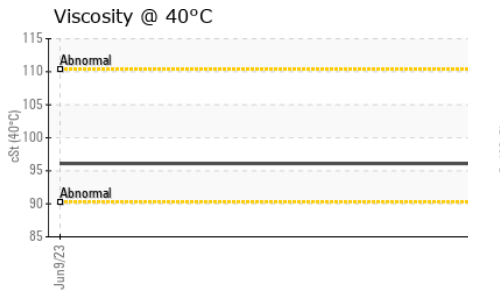
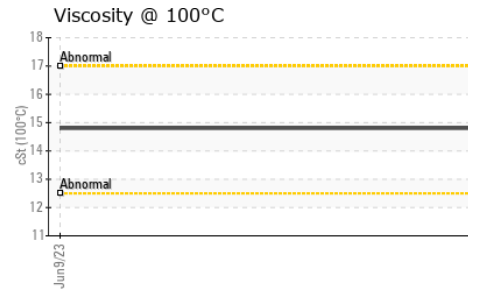
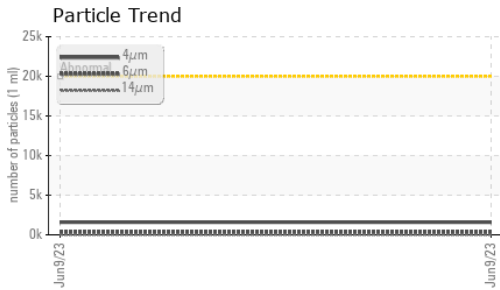
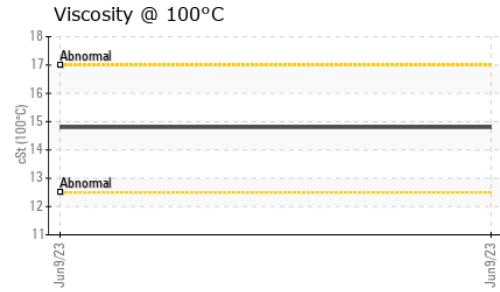
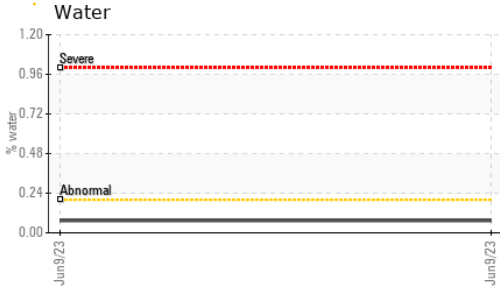
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>20000	<b>1583</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>412</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>21</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>4</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>18/16/12</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>▲ 4.23</b>	---	---



# OIL ANALYSIS REPORT



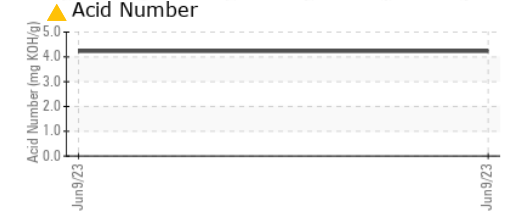
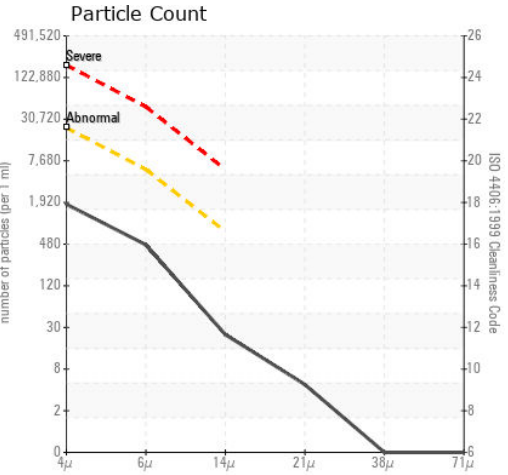
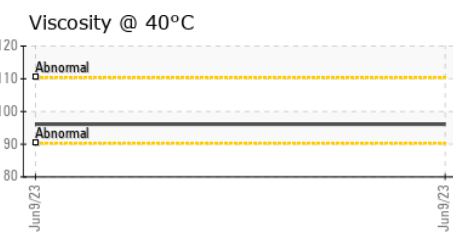
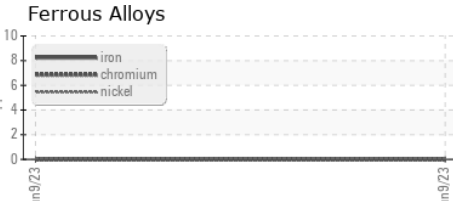
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	96.1	---	---
Visc @ 100°C	cSt	ASTM D445	14.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270	160	---	---

## SAMPLE IMAGES

	method	limit/base	current	history 1	history 2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0577488 **Received** : 12 Jun 2023  
**Lab Number** : 05870881 **Diagnosed** : 14 Jun 2023  
**Unique Number** : 10510665 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**COMPLIANCE and RESEARCH SERVICES**  
 1701 WEST FRONT ST  
 PLAINFIELD, NJ  
 US 07063  
 Contact: MATT LARKIN  
 blending@complianceandresearch.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)