



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**E-170**  
 Component  
**Right Final Drive**  
 Fluid  
**PHILLIPS 80W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0828443</b>	WC0780331	WC0780339
Sample Date		Client Info		<b>21 Dec 2023</b>	17 Aug 2023	12 Apr 2023
Machine Age	hrs	Client Info		<b>2247</b>	1653	1062
Oil Age	hrs	Client Info		<b>1185</b>	591	1062
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>101</b>	96	383
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	2	6
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	<1	2
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>0</b>	<1	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

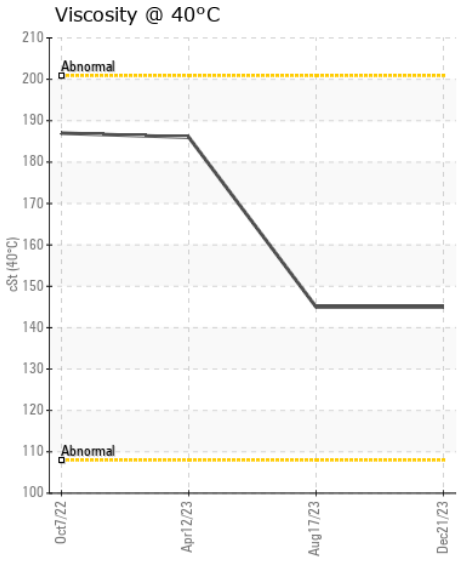
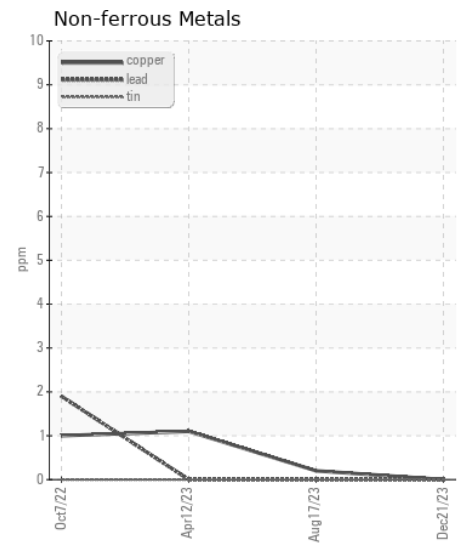
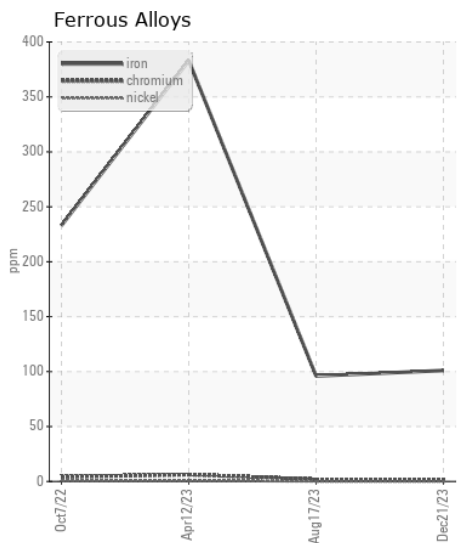
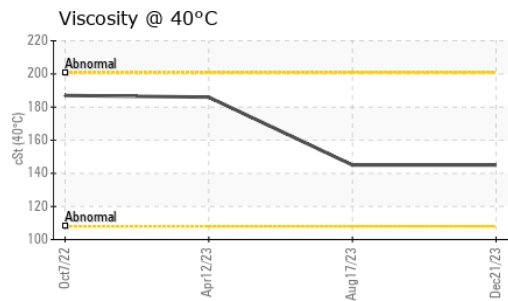
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>7</b>	7	22
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Boron	ppm	ASTM D5185m		<b>163</b>	185	58
Barium	ppm	ASTM D5185m		<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>2</b>	2	7
Magnesium	ppm	ASTM D5185m		<b>2</b>	2	1
Calcium	ppm	ASTM D5185m		<b>21</b>	28	24
Phosphorus	ppm	ASTM D5185m		<b>848</b>	794	598
Zinc	ppm	ASTM D5185m		<b>13</b>	13	17
Sulfur	ppm	ASTM D5185m		<b>17932</b>	20641	14475
Visc @ 40°C	cSt	ASTM D445		<b>145</b>	145	186



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0828443 **Received** : 26 Dec 2023  
**Lab Number** : 06045257 **Diagnosed** : 28 Dec 2023  
**Unique Number** : 10805865 **Diagnostician** : Sean Felton  
**Test Package** : CONST

**DUKE LAZZARA**  
 4201 FAYETTEVILLE RD  
 RALEIGH, NC  
 US 27603  
 Contact: NICK DIXON  
 NICK.DIXON@DUKELAZZAM.COM  
 T: (919)760-7797  
 F:

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)