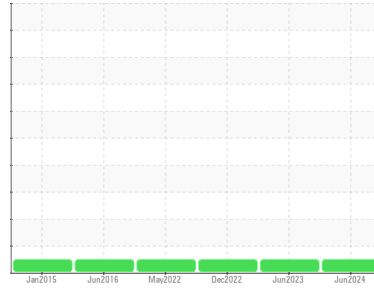


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**East Wing**  
Machine Id  
**ERJ170**  
Component  
**New (Unused) Oil**  
Fluid  
**{not provided} (300 GAL)**

**DIAGNOSIS**

**Recommendation**

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO50000859</b>	TO50000857	TO50000850
Sample Date	Client Info			<b>04 Jun 2024</b>	15 Jun 2023	02 Dec 2022
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>2</b>	0	0
Lead	ppm	ASTM D5185m	>5	<b>3</b>	0	2
Copper	ppm	ASTM D5185m	>5	<b>4</b>	3	3
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

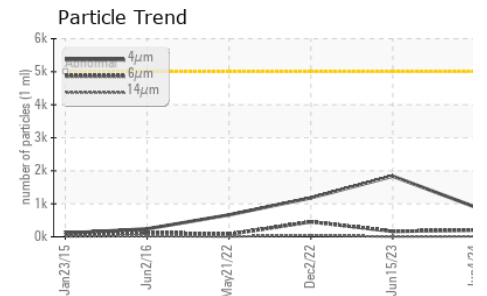
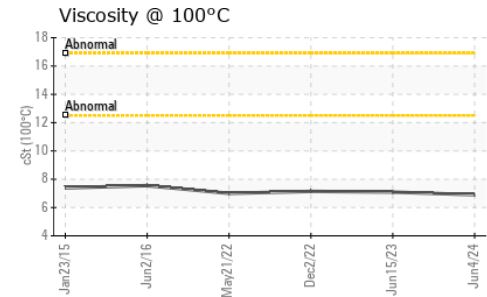
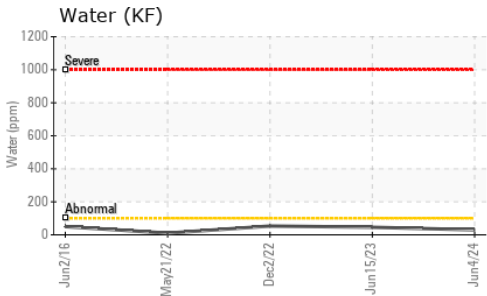
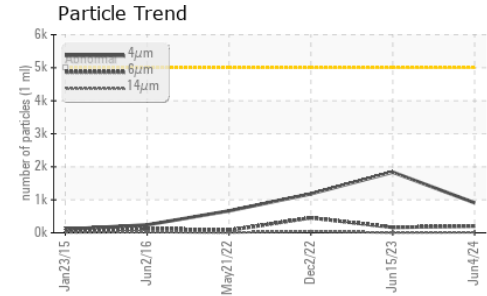
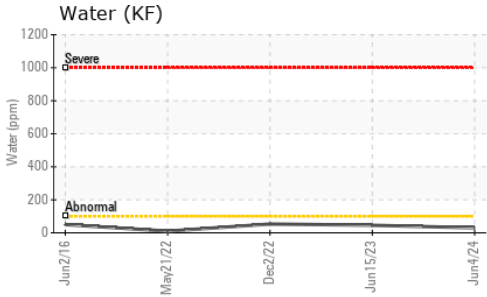
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	7
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>19</b>	16	18
Calcium	ppm	ASTM D5185m		<b>8</b>	11	15
Phosphorus	ppm	ASTM D5185m		<b>305</b>	340	345
Zinc	ppm	ASTM D5185m		<b>401</b>	390	389
Sulfur	ppm	ASTM D5185m		<b>2790</b>	3098	3082

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304		<b>0.003</b>	0.004	0.005
ppm Water	ppm	ASTM D6304		<b>30</b>	45.9	53.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>908</b>	1837	1181
Particles >6µm		ASTM D7647	>1300	<b>204</b>	165	456
Particles >14µm		ASTM D7647	>160	<b>13</b>	4	45
Particles >21µm		ASTM D7647	>40	<b>3</b>	3	10
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/15/11</b>	18/15/9	17/16/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.37</b>	0.33	0.36

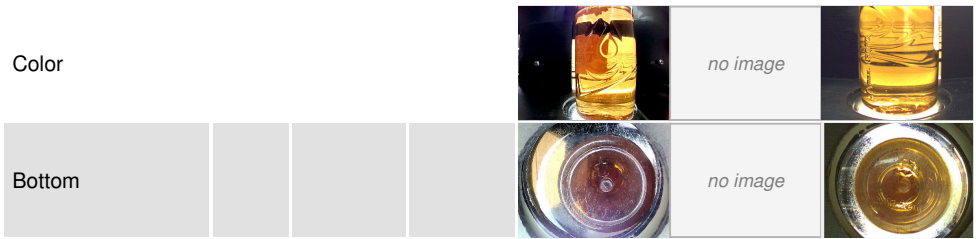
# OIL ANALYSIS REPORT



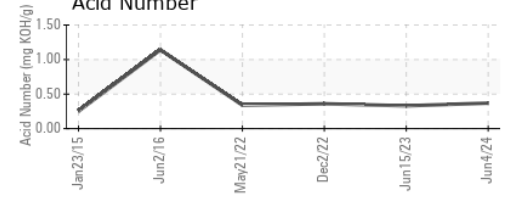
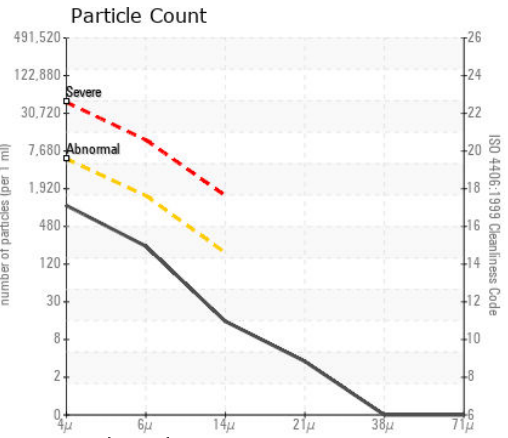
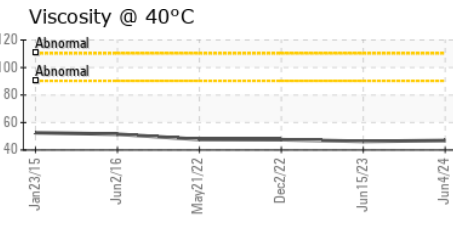
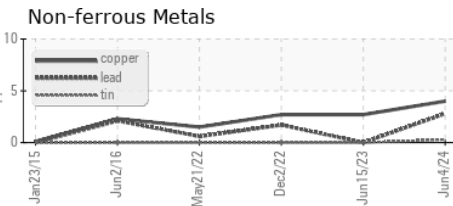
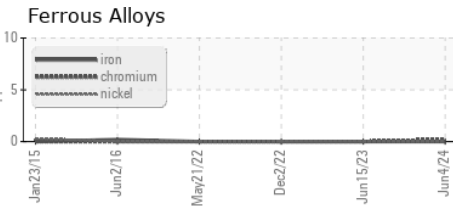
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.9	46.29	47.52
Visc @ 100°C	cSt	ASTM D445	6.9	7.09	7.14
Viscosity Index (VI)	Scale	ASTM D2270	102	111	108

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000859      **Received** : 12 Jun 2024      2929 WEST AIRFIELD DR, DFW AIRPORT  
**Lab Number** : 06207781      **Tested** : 19 Jun 2024      DALLAS, TX  
**Unique Number** : 11075242      **Diagnosed** : 19 Jun 2024 - Jonathan Hester      US 75261  
**Test Package** : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI )      Contact: JOAQUIN TORRES  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.      joaquin.torres@cae.com  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.      T:  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)      F: