



# OIL ANALYSIS REPORT

Area  
**FIO Automotive - F03000**  
 Machine Id  
**A2404095**  
 Component  
**Lube System**  
 Fluid  
**AW HYDRAULIC OIL ISO 68 (--- GAL)**

## Sample Rating Trend



**WEAR**



## DIAGNOSIS

### Recommendation

The sample submitted is 8 times dirtier than the ISO dirt count recommendation of 19/16/14.

### Wear

Copper ppm levels are noted.

### Contamination

Particles >4µm are abnormally high. Particles >6µm and oil cleanliness are abnormally high.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Batch #	Client Info		<b>Mobile</b>	---	---
Machine ID	Client Info		<b>G1 Press</b>	---	---
Department	Client Info		<b>Production</b>	---	---
Sample From	Client Info		<b>Machine</b>	---	---
Production Stage	Client Info		<b>Initial</b>	---	---
Sent to WC	Client Info		<b>04/17/2024</b>	---	---
Sample Number	Client Info		<b>E30001886</b>	---	---
Sample Date	Client Info		<b>16 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>2</b>	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	---
Nickel	ppm	ASTM D5185(m)	>20	<b>0</b>	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---
Lead	ppm	ASTM D5185(m)	>20	<b>2</b>	---
Copper	ppm	ASTM D5185(m)	>20	<b>22</b>	---
Tin	ppm	ASTM D5185(m)	>20	<b>0</b>	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

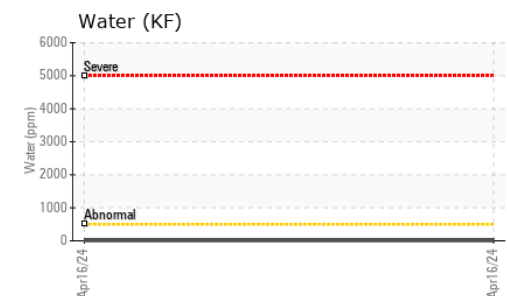
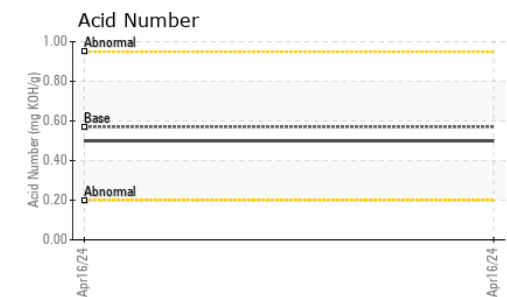
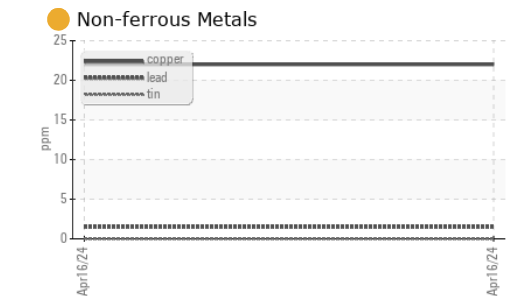
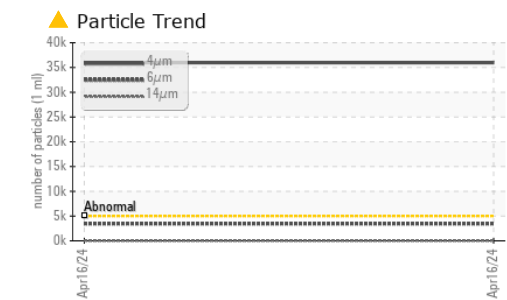
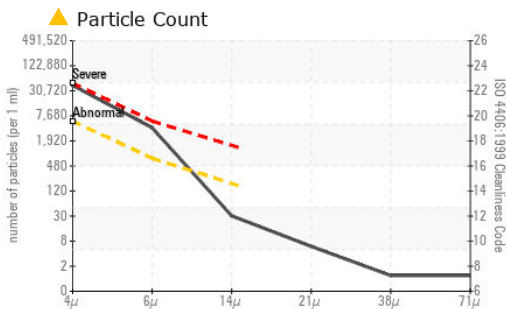
## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<b>0</b>	---
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	---
Molybdenum	ppm	ASTM D5185(m)	5	<b>0</b>	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	---
Magnesium	ppm	ASTM D5185(m)	25	<b>5</b>	---
Calcium	ppm	ASTM D5185(m)	200	<b>14</b>	---
Phosphorus	ppm	ASTM D5185(m)	300	<b>394</b>	---
Zinc	ppm	ASTM D5185(m)	370	<b>438</b>	---
Sulfur	ppm	ASTM D5185(m)	2500	<b>919</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>1</b>	---
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---
Water	%	ASTM D6304*	>0.05	<b>0.001</b>	---
ppm Water	ppm	ASTM D6304*	>500	<b>6</b>	---

# OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ <b>35967</b>	---	---
Particles >6µm	ASTM D7647	>640	▲ <b>3470</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>27</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>5</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16/14	▲ <b>22/19/12</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.57	<b>0.50</b>	---	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	68	<b>65.4</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.6	<b>8.7</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	96	<b>105</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : E30001886  
**Lab Number** : **02630218**  
**Unique Number** : 5763350  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

**Environmental 360 Solutions Ltd.**  
 640 Victoria Street  
 Cobourg, ON  
 CA K9A 5H5  
 Contact: Tatiana Sorkina  
 tsorkina@e360s.ca  
 T: (800)263-3939  
 F: (905)373-4950

To discuss this sample report, contact Customer Service at 1-905-372-2251.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.