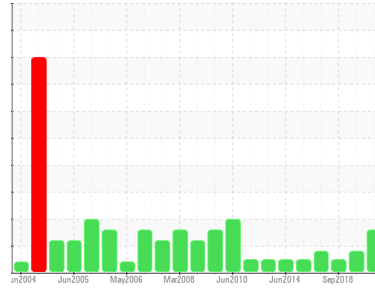


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**MACHINE 18 (S/N 257812)**

Component  
**Hydraulic System**

Fluid  
**ESSO NUTO H ISO 46 (--- LTR)**

**DIAGNOSIS**

**▲ Recommendation**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

**▲ Wear**

The copper level is abnormal. All other component wear rates are normal.

**▲ Contamination**

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>RP0034653</b>	RP0010894	RP73133
Sample Date	Client Info			<b>15 Jan 2024</b>	18 Jan 2021	09 Sep 2018
Machine Age	yrs	Client Info		<b>0</b>	0	0
Oil Age	yrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>8</b>	2	2
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	3	<1
Copper	ppm	ASTM D5185m	>20	<b>▲ 71</b>	▲ 71	4
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

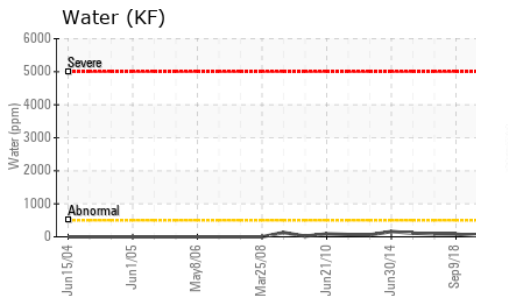
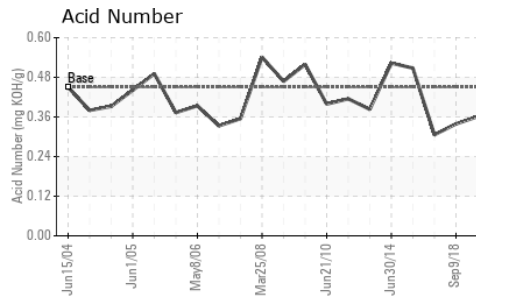
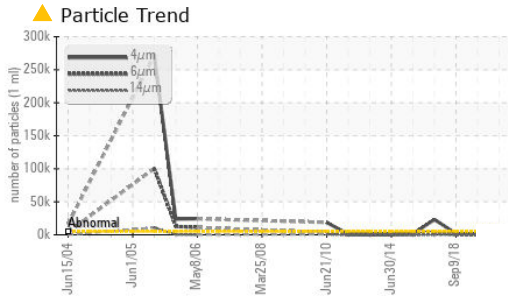
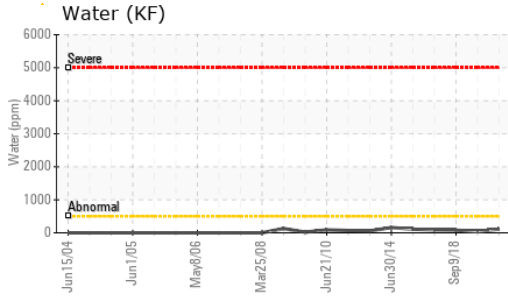
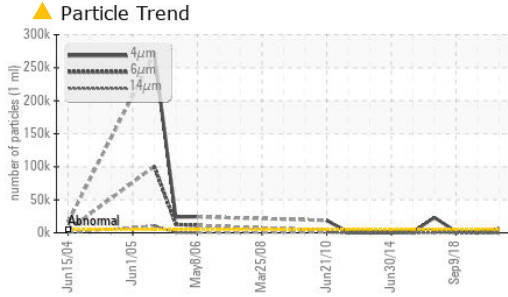
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>4</b>	<1	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	5	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m	50	<b>22</b>	2	31
Phosphorus	ppm	ASTM D5185m	330	<b>360</b>	375	320
Zinc	ppm	ASTM D5185m	410	<b>375</b>	404	390

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	1
Water	%	ASTM D6304	>0.05	<b>0.011</b>	0.003	0.008
ppm Water	ppm	ASTM D6304	>500	<b>114</b>	38.0	80

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 5782</b>	1068	1712
Particles >6µm		ASTM D7647	>1300	<b>375</b>	153	354
Particles >14µm		ASTM D7647	>160	<b>12</b>	21	31
Particles >21µm		ASTM D7647	>40	<b>2</b>	7	9
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 20/16/11</b>	17/14/12	18/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.45	<b>0.46</b>	0.361	0.339

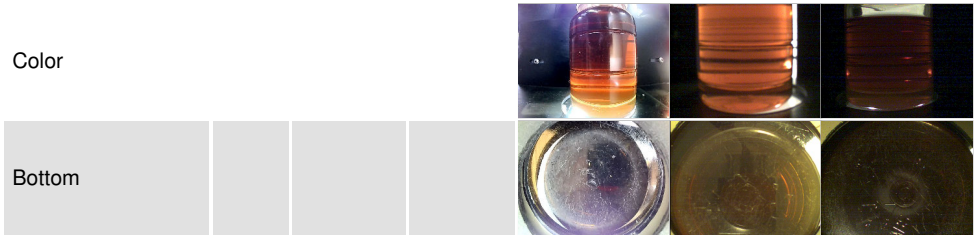
# OIL ANALYSIS REPORT



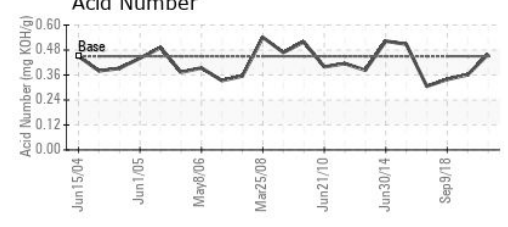
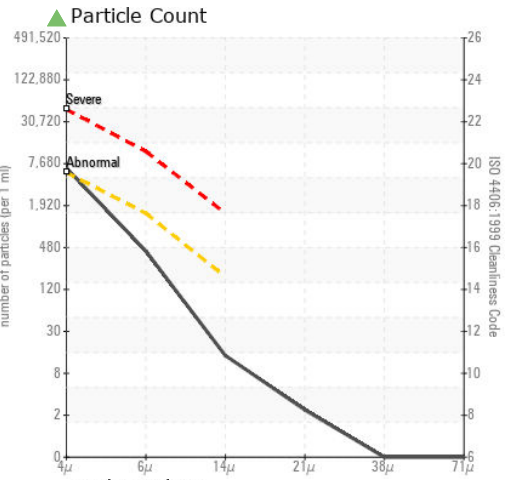
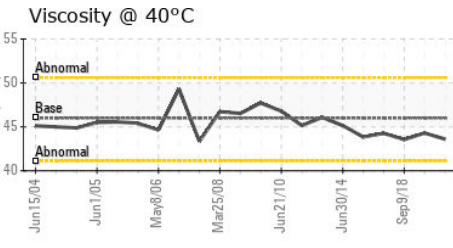
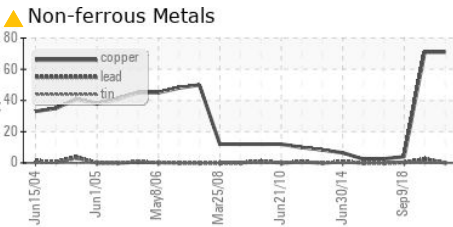
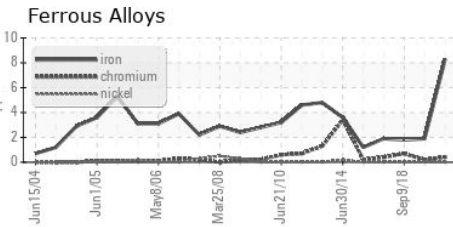
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.6	44.3	43.56

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0034653 **Received** : 16 Jan 2024  
**Lab Number** : 06061064 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10832446 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**YANFENG - ROMULUS**  
 9800 INKSTER RD  
 ROMULUS, MI  
 US 48174  
 Contact: AARON BLIESNER  
 aaron.bliesner@yanfeng.com  
 T:  
 F: (734)946-0237

Certificate L2367  
 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)