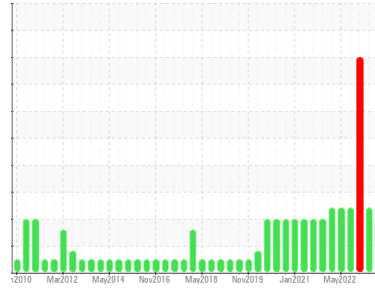




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**455.XX414**

Component  
**Hydraulic System**

Fluid  
**MOBIL NYVAC FR 200 FLUID (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates present in the oil.

### Fluid Condition

The pH level of this fluid is within the acceptable limits. The condition of the oil is acceptable for the time in service. pH 9.0.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>RP0008454</b>	RP0000828	RP0000830
Sample Date	Client Info	<b>20 Mar 2024</b>	08 May 2023	18 Apr 2023
Machine Age	days	Client Info	0	0
Oil Age	days	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	▲ 540
Chromium ppm	ASTM D5185m >20	<b>0</b>	<1	2
Nickel ppm	ASTM D5185m >20	<b>0</b>	<1	2
Titanium ppm	ASTM D5185m	<b>0</b>	0	0
Silver ppm	ASTM D5185m	<b>0</b>	2	0
Aluminum ppm	ASTM D5185m >20	<b>1</b>	0	0
Lead ppm	ASTM D5185m >20	<b>0</b>	<1	0
Copper ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Tin ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Vanadium ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium ppm	ASTM D5185m	<b>0</b>	2	2

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m	<b>1</b>	4	26
Barium ppm	ASTM D5185m	<b>2</b>	0	0
Molybdenum ppm	ASTM D5185m	<b>0</b>	0	<1
Manganese ppm	ASTM D5185m	<b>0</b>	<1	3
Magnesium ppm	ASTM D5185m	<b>4</b>	4	3
Calcium ppm	ASTM D5185m	<b>12</b>	4	11
Phosphorus ppm	ASTM D5185m	<b>19</b>	13	18
Zinc ppm	ASTM D5185m	<b>36</b>	23	69

## CONTAMINANTS

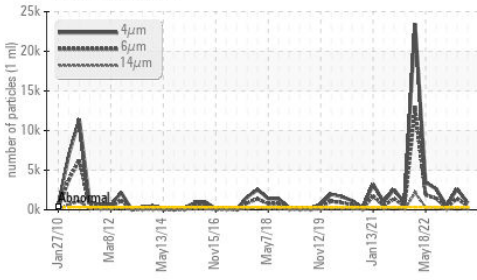
method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	4
Sodium ppm	ASTM D5185m	<b>3</b>	1	42
Potassium ppm	ASTM D5185m >20	<b>1</b>	0	4
Water %	ASTM D6304 >55	<b>44.5</b>	43.7	42.6
ppm Water	ASTM D6304 >55000	<b>445000</b>	437000	426000

## FLUID CLEANLINESS

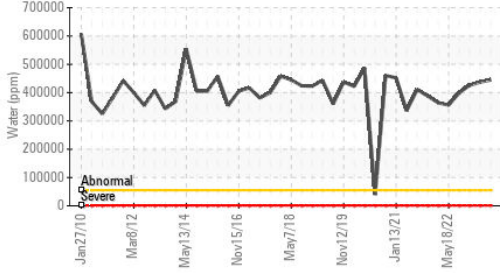
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >320	▲ <b>887</b>	▲ 2636	504
Particles >6µm	ASTM D7647 >80	▲ <b>483</b>	▲ 1436	▲ 275
Particles >14µm	ASTM D7647 >20	▲ <b>82</b>	▲ 244	▲ 47
Particles >21µm	ASTM D7647 >4	▲ <b>28</b>	▲ 82	▲ 16
Particles >38µm	ASTM D7647 >3	▲ <b>4</b>	▲ 13	▲ 2
Particles >71µm	ASTM D7647 >3	<b>0</b>	1	0
Oil Cleanliness	ISO 4406 (c) >15/13/11	▲ <b>17/16/14</b>	▲ 19/18/15	▲ 16/15/13

# OIL ANALYSIS REPORT

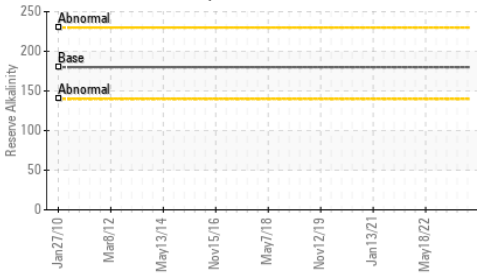
## ▲ Particle Trend



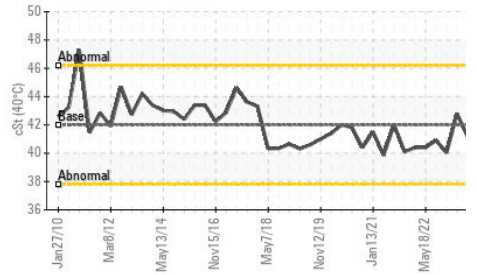
## Water (KF)



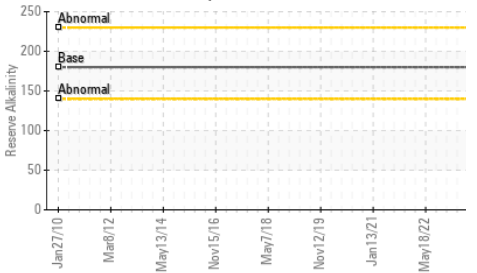
## Reserve Alkalinity



## Viscosity @ 40°C



## Reserve Alkalinity



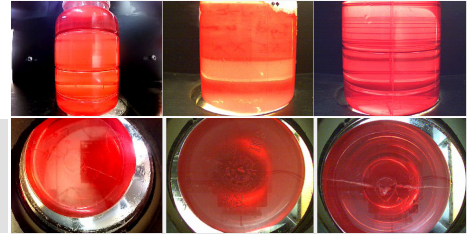
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>55	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	9.00	8.00	9.00
Visc @ 40°C	cSt	ASTM D445	42	42.8	40.02

SAMPLE IMAGES	method	limit/base	current	history1	history2
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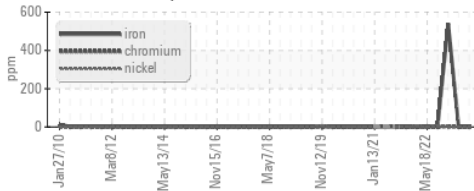
Color

Bottom

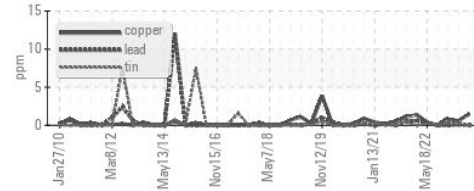


## GRAPHS

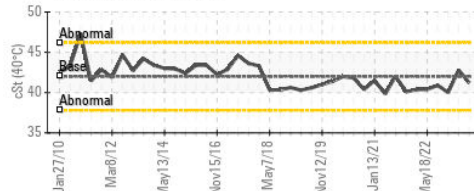
### Ferrous Alloys



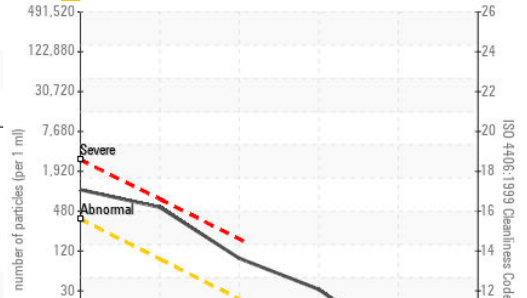
### Non-ferrous Metals



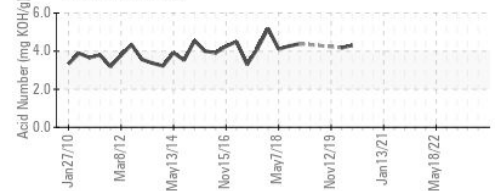
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : RP0008454

**Lab Number** : 06130688

**Unique Number** : 10950153

**Test Package** : IND 2 ( Additional Tests: pH, ReserveAlk )

**Received** : 27 Mar 2024

**Tested** : 02 Apr 2024

**Diagnosed** : 02 Apr 2024 - Jonathan Hester

**INTERNATIONAL PAPER**

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F: (252)633-7761

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)