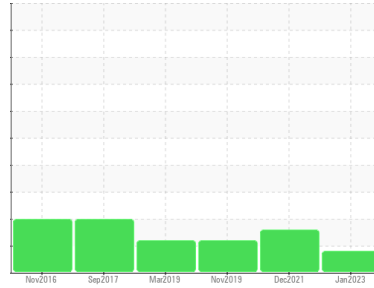




# OIL ANALYSIS REPORT

## Sample Rating Trend



ISO



Machine Id  
**260 (S/N 84)**

Component  
**Hydraulic System**

Fluid  
**MOBIL MOBILFLUID 424 (--- GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: 13221.2 hours )

#### Wear

All 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>PTK0003774</b>	PTK0000859	PTKM2326262
Sample Date	Client Info			<b>09 Jan 2023</b>	02 Dec 2021	18 Nov 2019
Machine Age	hrs	Client Info		<b>13221</b>	13205	12755
Oil Age	hrs	Client Info		<b>13221</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

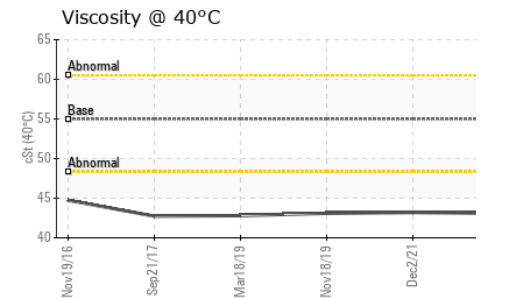
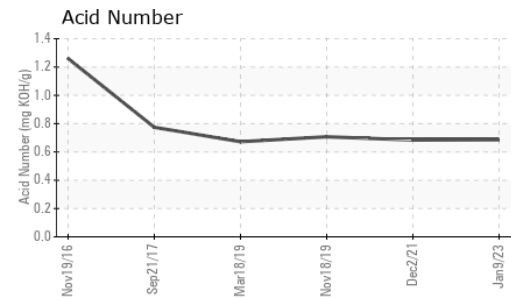
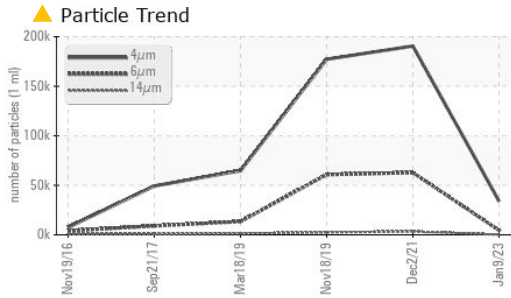
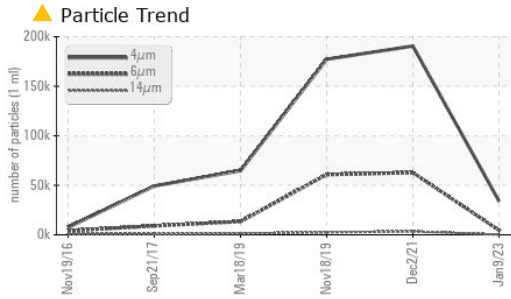
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>11</b>	14	11
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>10	<b>5</b>	8	6
Copper	ppm	ASTM D5185m	>75	<b>49</b>	49	41
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>38</b>	46	33
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m		<b>10</b>	11	8
Calcium	ppm	ASTM D5185m		<b>1603</b>	1658	1688
Phosphorus	ppm	ASTM D5185m		<b>674</b>	764	716
Zinc	ppm	ASTM D5185m		<b>823</b>	903	840
Sulfur	ppm	ASTM D5185m		<b>5274</b>	3847	1177

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>3</b>	7	8
Sodium	ppm	ASTM D5185m		<b>4</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>33927</b>	190536	177254
Particles >6µm		ASTM D7647	>2500	<b>▲ 4520</b>	▲ 62806	▲ 60798
Particles >14µm		ASTM D7647	>320	<b>125</b>	▲ 3336	▲ 2428
Particles >21µm		ASTM D7647	>80	<b>21</b>	▲ 877	▲ 346
Particles >38µm		ASTM D7647	>20	<b>1</b>	▲ 25	11
Particles >71µm		ASTM D7647	>4	<b>0</b>	0	3
Oil Cleanliness		ISO 4406 (c)	>18/15	<b>▲ 19/14</b>	▲ 25/23/19	▲ 25/23/18

# OIL ANALYSIS REPORT

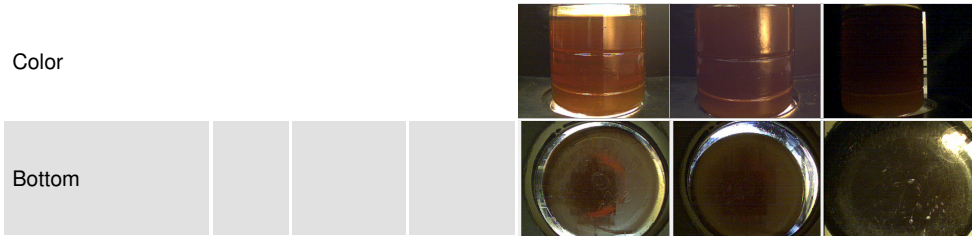


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.686</b>	0.684	0.707

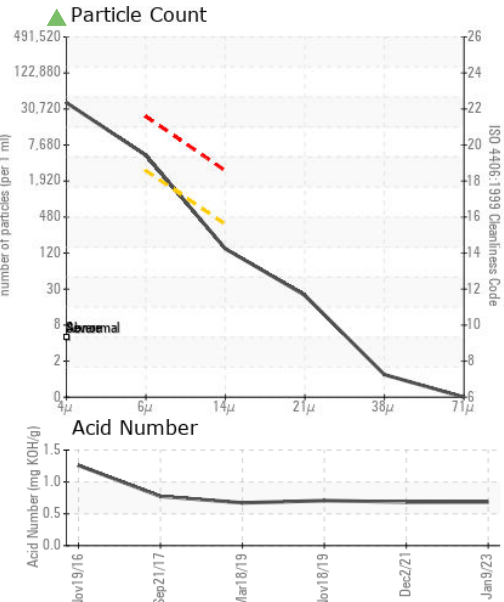
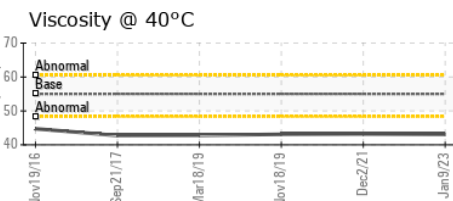
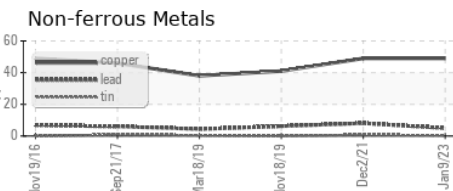
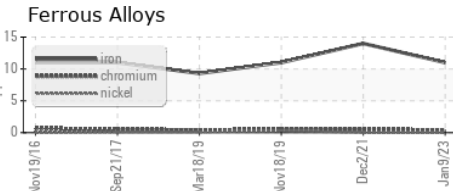
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	55	<b>43.1</b>	43.2	43.1

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



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PTK0003774 **Received** : 06 Feb 2023  
**Lab Number** : 05759427 **Diagnosed** : 07 Feb 2023  
**Unique Number** : 10324034 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2

**DRILLING SERVICE**  
 13230 FERGUSON LN  
 BRIDGETON, MO  
 US 63044  
 Contact: BRUCE MURPHY  
 bdmurphy@drillingserviceco.com  
 T: (314)291-1111  
 F: (314)291-1115

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)