

Machine Id  
**HYSTER BEAM FORKLIFT**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (4 QTS)**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor. Tests do not reveal cause for reported problem.

**Wear**

All component wear rates are normal.

**Contamination**

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

**Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>ST44653</b>	---	---
Sample Date	Client Info			<b>26 Sep 2023</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>100</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

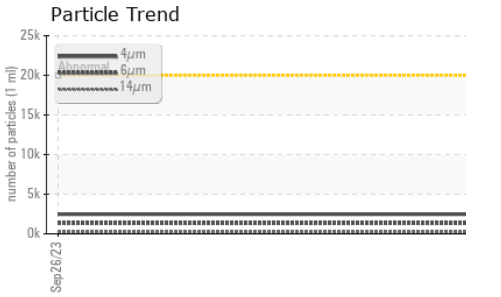
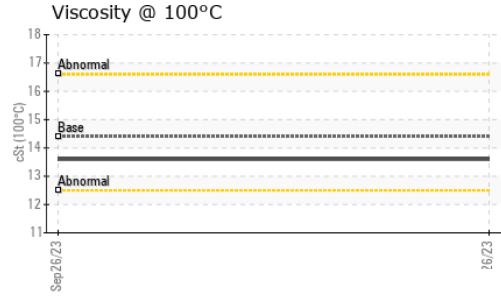
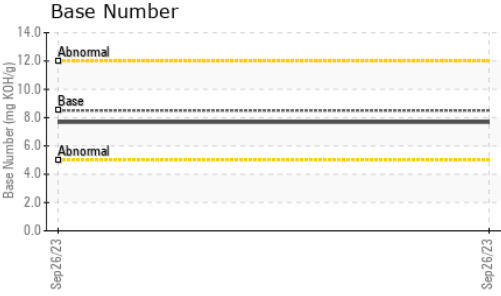
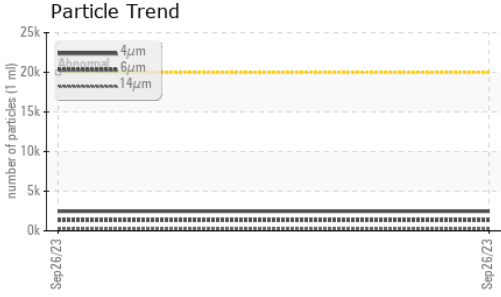
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>8</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>233</b>	---	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	100	<b>89</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	450	<b>530</b>	---	---
Calcium	ppm	ASTM D5185m	3000	<b>881</b>	---	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1172</b>	---	---
Zinc	ppm	ASTM D5185m	1350	<b>1392</b>	---	---
Sulfur	ppm	ASTM D5185m	4250	<b>4294</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	---	---
Sodium	ppm	ASTM D5185m	>158	<b>6</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.8</b>	---	---
Sulfation	Abs./1mm	*ASTM D7415	>30	<b>16.5</b>	---	---

# OIL ANALYSIS REPORT



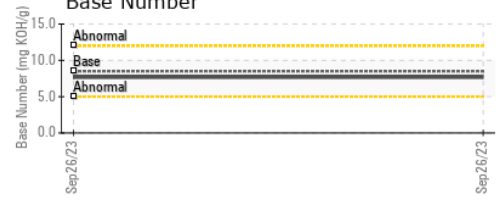
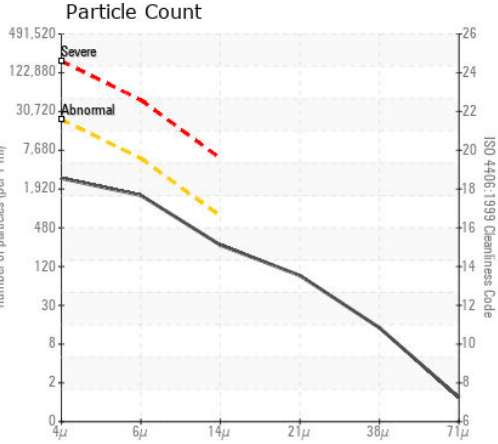
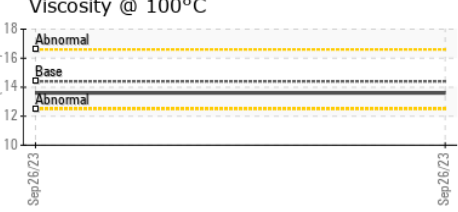
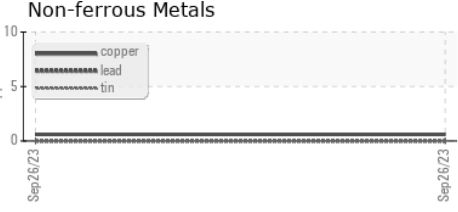
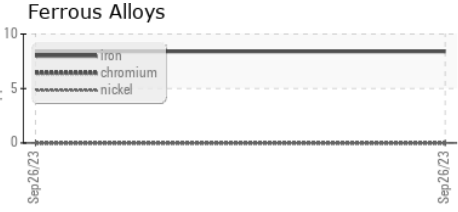
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>2462</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>1341</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>228</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>77</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>12</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>18/18/15</b>	---	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	<b>13.0</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896	8.5	<b>7.68</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	>0.2	<b>NEG</b>	---	---
Free Water	scalar *Visual		<b>NEG</b>	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D445	14.4	<b>13.6</b>	---	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ST44653 **Received** : 02 Oct 2023  
**Lab Number** : **05967178** **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10673729 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 2 ( Additional Tests: PrtCount )

**JACKSON MOBILE EQUIPMENT REPAIR**  
 1713 OLD NC 27 HWY  
 MOUNT HOLLY, NC  
 US 28120  
 Contact: JEFF  
 jackson.er@icloud.com  
 T: (704)524-3812  
 F:

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)