



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**CATERPILLAR 775F HAUL TRUCK 6835 (S/N DLS00972)**  
Component  
**Rear Differential**  
Fluid  
**TULCO LUBSOIL TO-4 50 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10001787</b>	TO10001769	TO10001498
Sample Date		Client Info		<b>06 Feb 2023</b>	06 Feb 2023	27 Oct 2022
Machine Age	hrs	Client Info		<b>24889</b>	24889	24405
Oil Age	hrs	Client Info		<b>2443</b>	1498	1014
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>None</b>	None	N/A
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>30</b>	17	15
Iron	ppm	ASTM D5185m	>500	<b>17</b>	13	11
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185m	>103	<b>6</b>	6	5
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

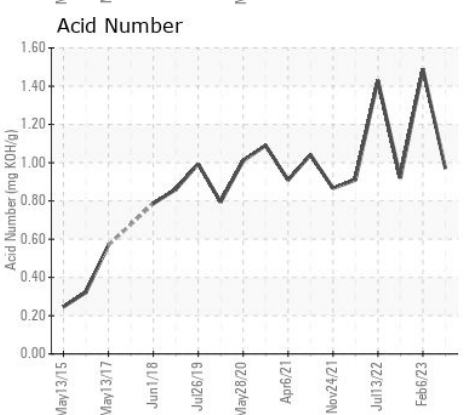
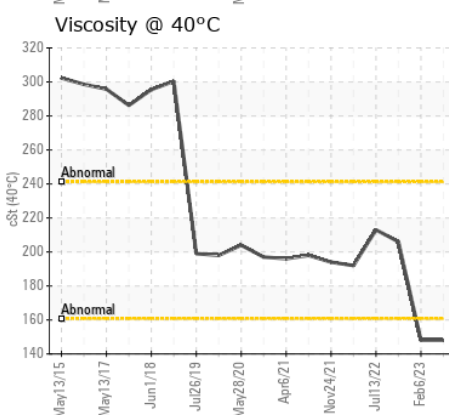
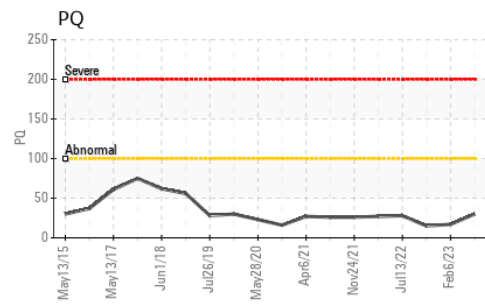
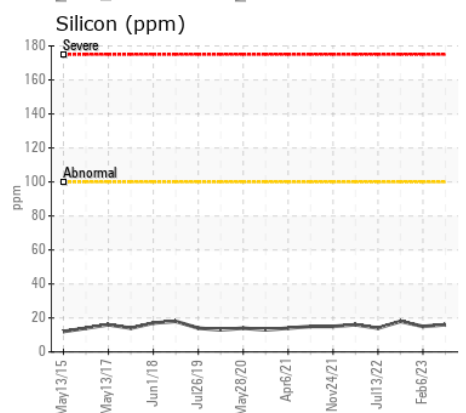
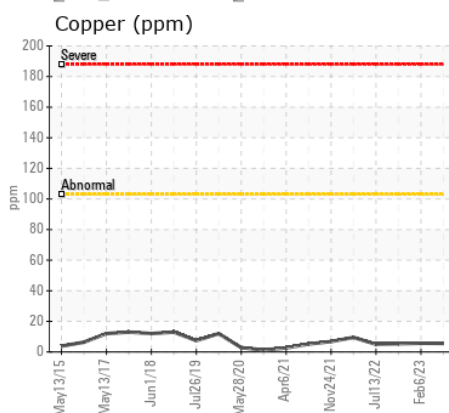
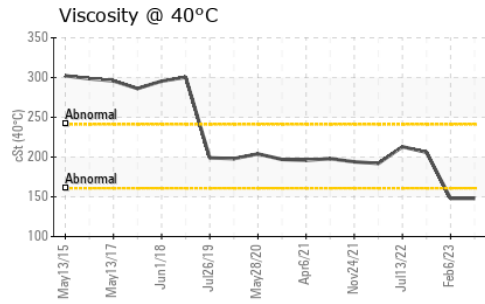
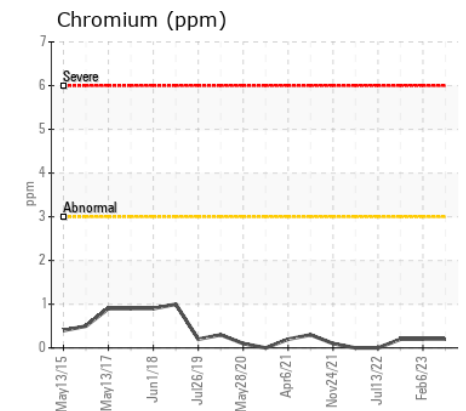
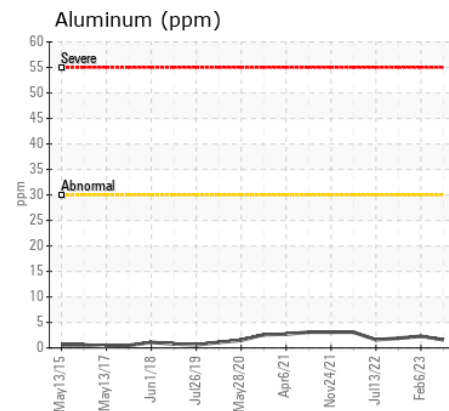
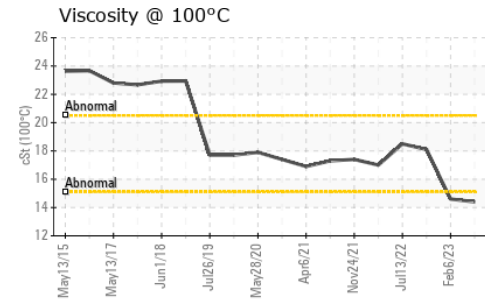
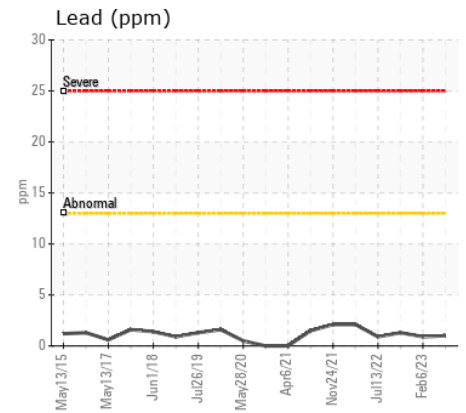
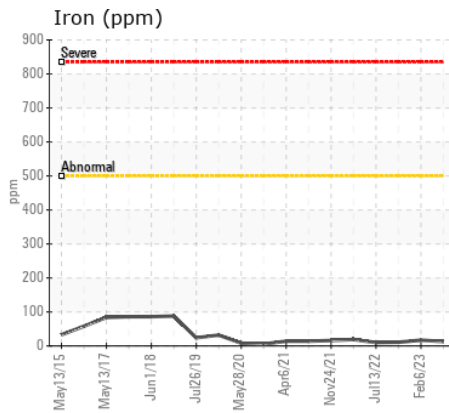
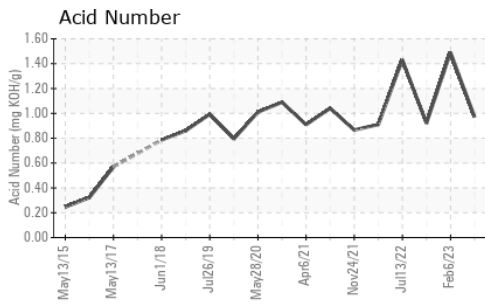
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	<b>15</b>	16	18
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	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	>.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	4	4
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>44</b>	45	14
Calcium	ppm	ASTM D5185m		<b>2583</b>	2637	3374
Phosphorus	ppm	ASTM D5185m		<b>852</b>	846	912
Zinc	ppm	ASTM D5185m		<b>1073</b>	1047	1156
Sulfur	ppm	ASTM D5185m		<b>4355</b>	5088	5829
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.97</b>	1.49	0.92
Visc @ 40°C	cSt	ASTM D445		<b>148</b>	▲ 148	206
Visc @ 100°C	cSt	ASTM D445		<b>14.4</b>	▲ 14.6	18.1
Viscosity Index (VI)	Scale	ASTM D2270		<b>94</b>	97	96



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10001787 **Received** : 09 Mar 2023  
**Lab Number** : 05787460 **Tested** : 10 Mar 2023  
**Unique Number** : 10372131 **Diagnosed** : 10 Mar 2023 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**ANCHOR STONE TULSA ROCK**  
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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)