



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**DE Samples - CAT LAB**  
Machine Id  
**CATERPILLAR 980K LOADER 6775 (S/N W7K01443)**  
Component  
**Front Left Final Drive**  
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>TO10003725</b>	TO10003397	TO10003118
Sample Date		Client Info		<b>13 Jul 2024</b>	04 May 2024	22 Feb 2024
Machine Age	hrs	Client Info		<b>28996</b>	28486	27973
Oil Age	hrs	Client Info		<b>1249</b>	502	4171
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>N/A</b>	None	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>500	<b>38</b>	45	43
Iron	ppm	ASTM D5185m	>800	<b>55</b>	51	48
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>16</b>	11	11
Tin	ppm	ASTM D5185m	>8	<b>0</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**

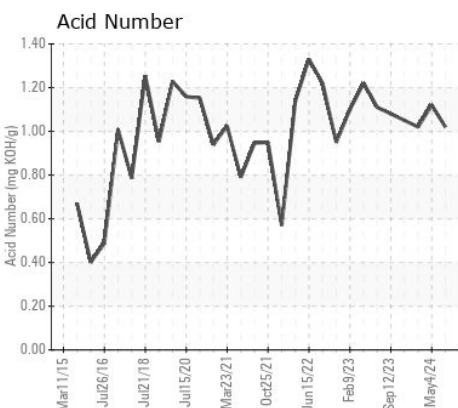
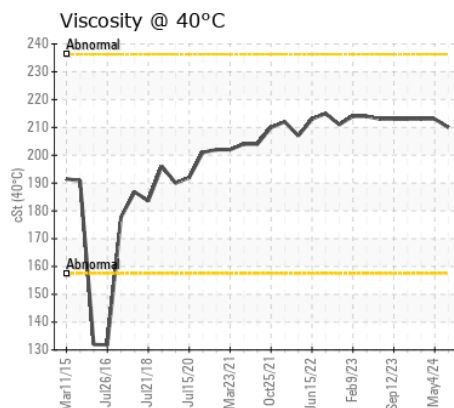
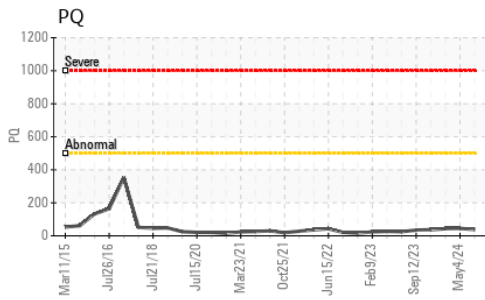
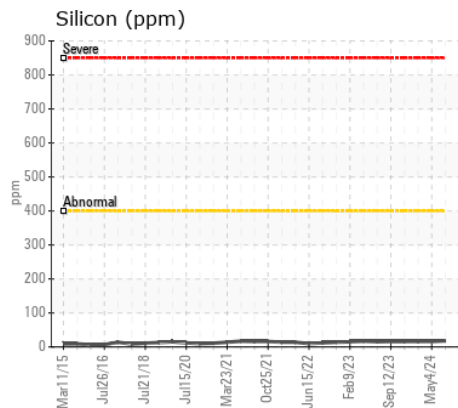
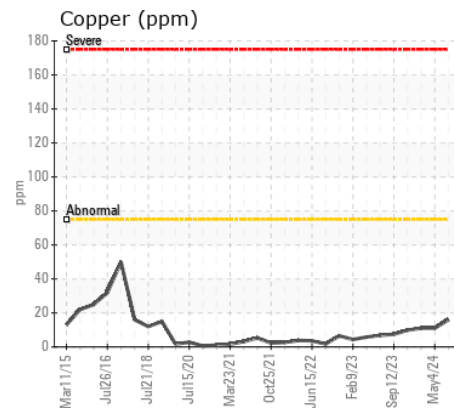
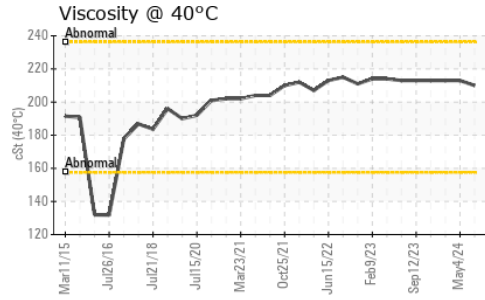
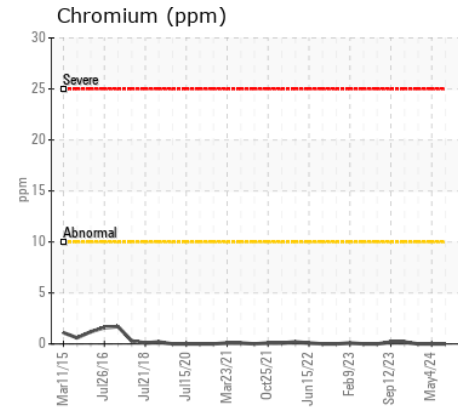
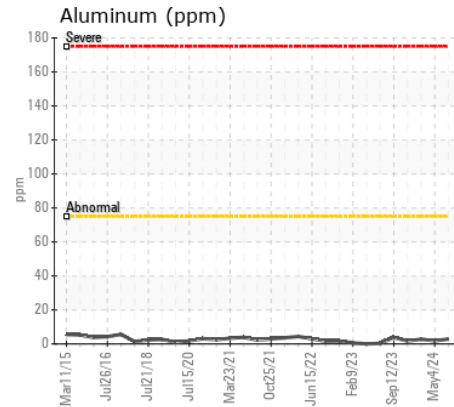
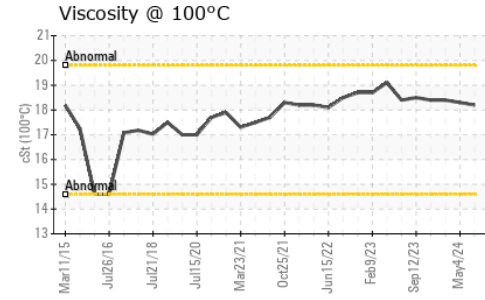
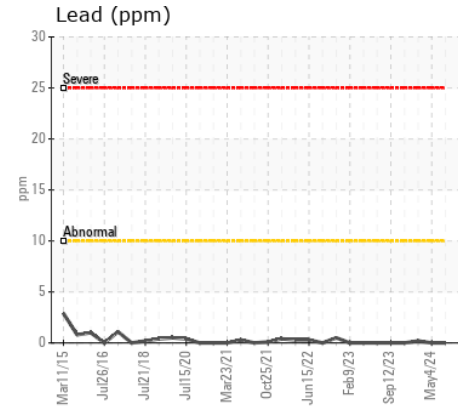
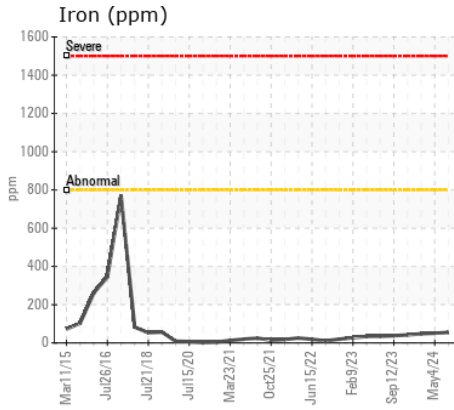
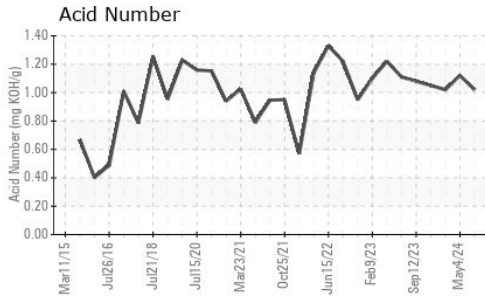
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>18</b>	16	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>0.2	<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	>0.2	<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>5</b>	5	5
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>2</b>	12	14
Calcium	ppm	ASTM D5185m		<b>3711</b>	3299	3259
Phosphorus	ppm	ASTM D5185m		<b>1056</b>	1016	968
Zinc	ppm	ASTM D5185m		<b>1255</b>	1186	1191
Sulfur	ppm	ASTM D5185m		<b>6072</b>	5821	4776
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.02</b>	1.12	1.02
Visc @ 40°C	cSt	ASTM D445		<b>210</b>	213	213
Visc @ 100°C	cSt	ASTM D445		<b>18.2</b>	18.3	18.4
Viscosity Index (VI)	Scale	ASTM D2270		<b>95</b>	94	95



Certificate L2367

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

Sample No. : TO10003725

Lab Number : 06240986

Unique Number : 11129820

Test Package : MOB 2 ( Additional Tests: KV100, PQ, VI )

Received : 18 Jul 2024

Tested : 20 Jul 2024

Diagnosed : 20 Jul 2024 - Wes Davis

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)

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