



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>TO10003397</b>	TO10003118	TO10002815
Sample Date		Client Info		<b>04 May 2024</b>	22 Feb 2024	04 Dec 2023
Machine Age	hrs	Client Info		<b>28486</b>	27973	27433
Oil Age	hrs	Client Info		<b>502</b>	4171	3631
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>	Not Changd	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>500	<b>45</b>	43	37
Iron	ppm	ASTM D5185m	>800	<b>51</b>	48	42
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>2</b>	3	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>75	<b>11</b>	11	10
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

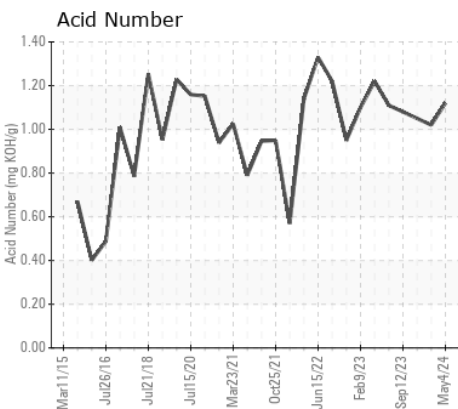
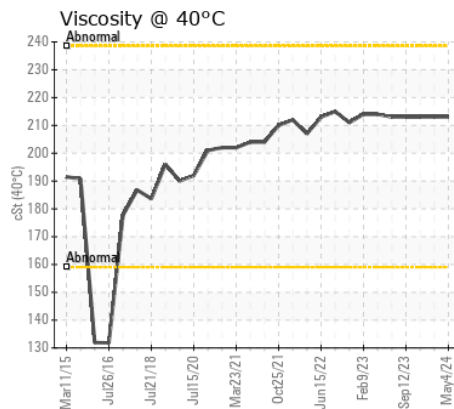
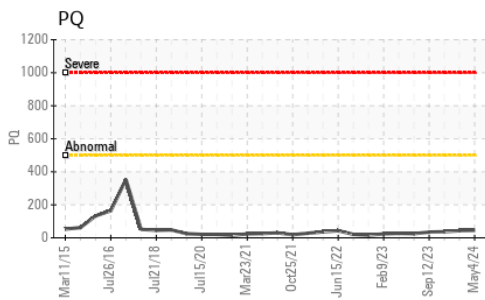
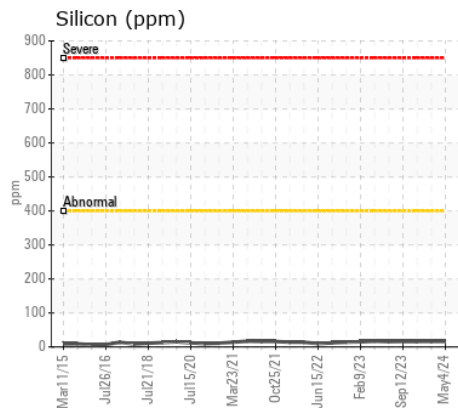
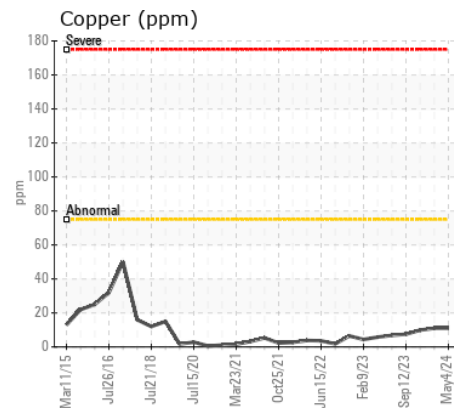
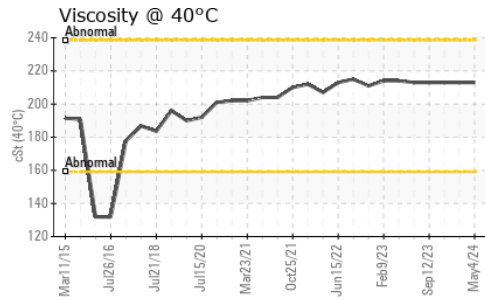
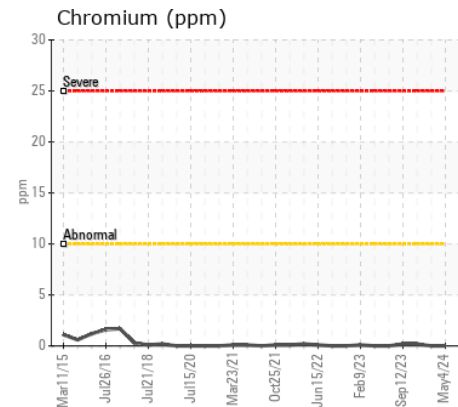
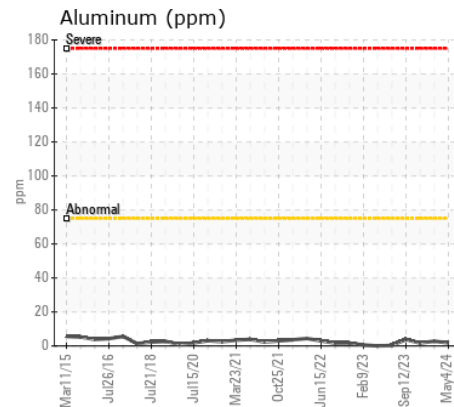
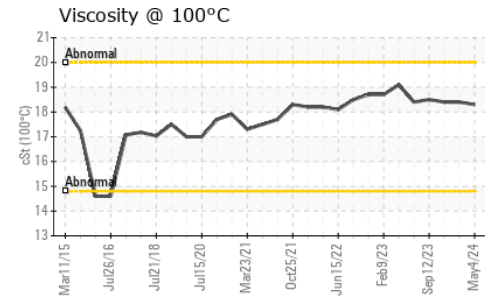
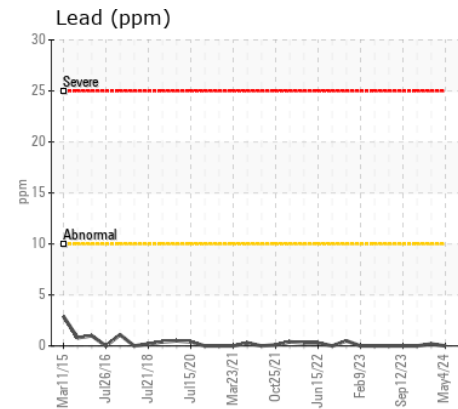
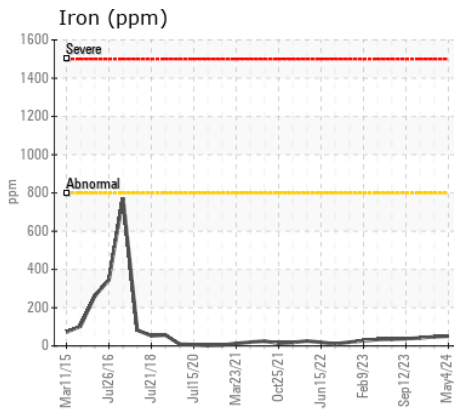
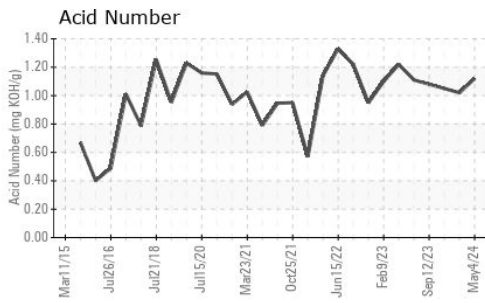
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>16</b>	16	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
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	4
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>12</b>	14	13
Calcium	ppm	ASTM D5185m		<b>3299</b>	3259	3200
Phosphorus	ppm	ASTM D5185m		<b>1016</b>	968	939
Zinc	ppm	ASTM D5185m		<b>1186</b>	1191	1205
Sulfur	ppm	ASTM D5185m		<b>5821</b>	4776	4925
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.12</b>	1.02	1.05
Visc @ 40°C	cSt	ASTM D445		<b>213</b>	213	213
Visc @ 100°C	cSt	ASTM D445		<b>18.3</b>	18.4	18.4
Viscosity Index (VI)	Scale	ASTM D2270		<b>94</b>	95	95



Certificate L2367

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

**Sample No.** : TO10003397

**Lab Number** : 06176197

**Unique Number** : 11022250

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

**Received** : 10 May 2024

**Tested** : 13 May 2024

**Diagnosed** : 13 May 2024 - Wes Davis

**ANCHOR STONE TULSA ROCK**

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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)