



OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR 980K LOADER 6775 (S/N W7K01443)**  
Component  
**Rear Differential**  
Fluid  
**TULCO LUBSOIL TO-4 50 (17 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10002818</b>	TO10002488	TO10002356
Sample Date		Client Info		<b>04 Dec 2023</b>	12 Sep 2023	20 Jun 2023
Machine Age	hrs	Client Info		<b>27433</b>	26862	26348
Oil Age	hrs	Client Info		<b>3631</b>	3060	2546
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	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184		<b>69</b>	63	60
Iron	ppm	ASTM D5185m	>500	<b>69</b>	66	69
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>2</b>	4	<1
Lead	ppm	ASTM D5185m	>13	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>103	<b>8</b>	7	6
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

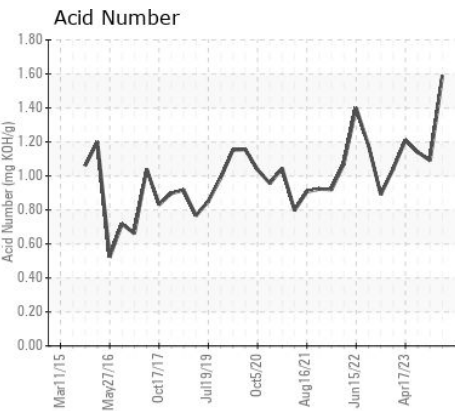
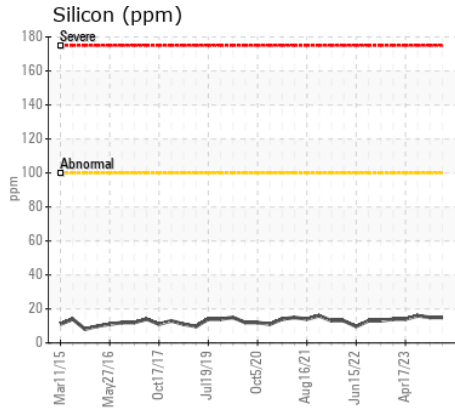
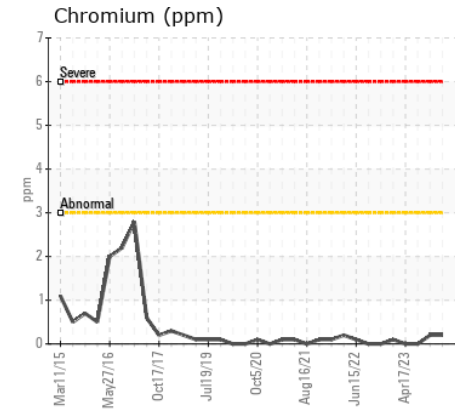
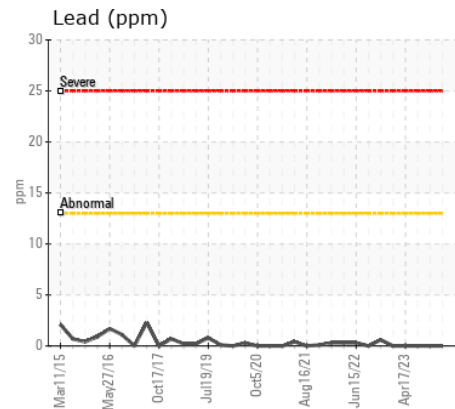
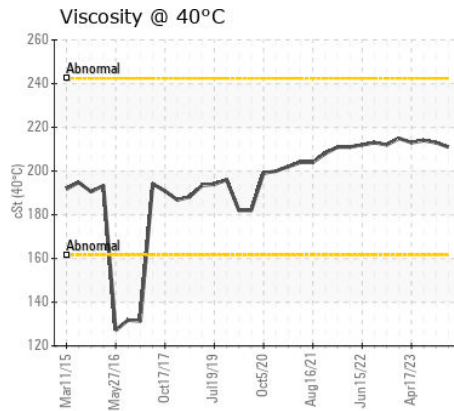
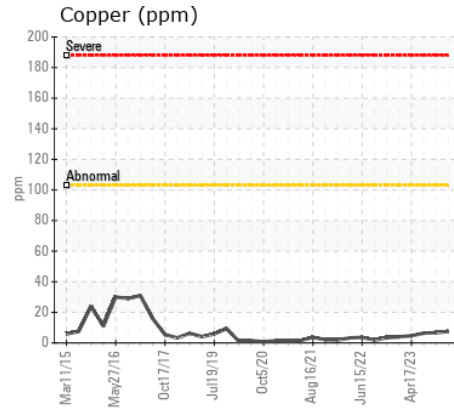
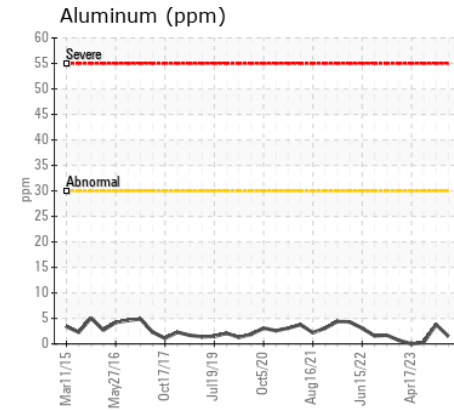
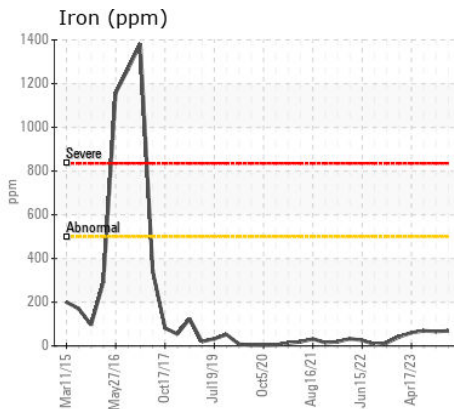
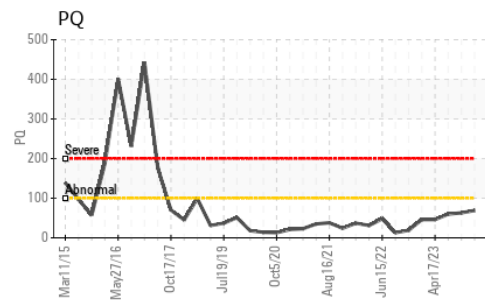
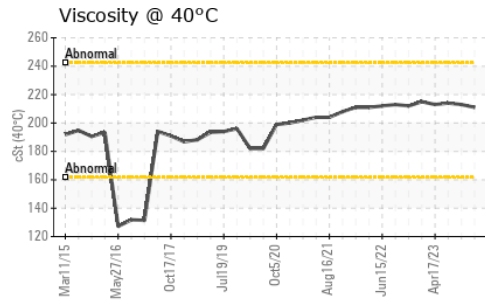
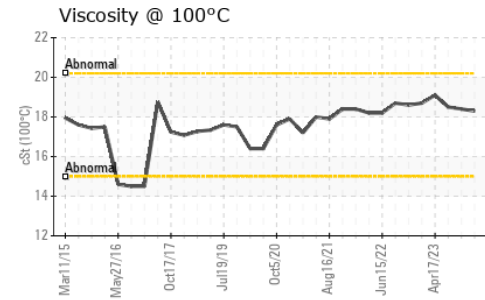
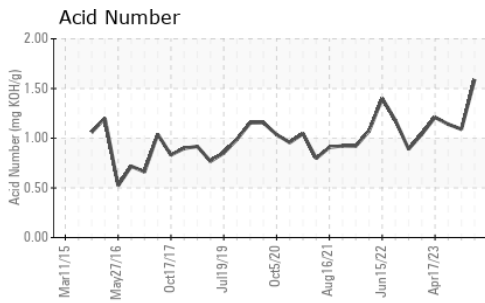
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	<b>15</b>	15	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	2
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>4</b>	3	0
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</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>14</b>	11	11
Calcium	ppm	ASTM D5185m		<b>3120</b>	3291	3469
Phosphorus	ppm	ASTM D5185m		<b>957</b>	962	989
Zinc	ppm	ASTM D5185m		<b>1191</b>	1213	1193
Sulfur	ppm	ASTM D5185m		<b>4915</b>	5467	5379
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.59</b>	1.09	1.14
Visc @ 40°C	cSt	ASTM D445		<b>211</b>	213	214
Visc @ 100°C	cSt	ASTM D445		<b>18.3</b>	18.4	18.5
Viscosity Index (VI)	Scale	ASTM D2270		<b>95</b>	95	95



Certificate L2367

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

Sample No. : TO10002818

Lab Number : 06030824

Unique Number : 10780615

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

Received : 11 Dec 2023

Tested : 13 Dec 2023

Diagnosed : 13 Dec 2023 - Wes Davis

**ANCHOR STONE TULSA ROCK**

TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE

TULSA, OK

US 74137

Contact: MIKE SNYDER

msnyder@anchorstoneco.com

T: (417)850-9635

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)