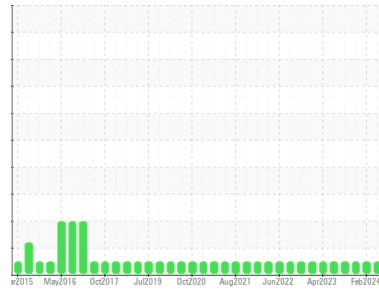


# OIL ANALYSIS REPORT



Area  
**DE Samples - CAT LAB**  
 Machine ID  
**CATERPILLAR 980K LOADER 6775 (S/N W7K01443)**  
 Component  
**Rear Differential**  
 Fluid  
**TULCO LUBSOIL TO-4 50 (17 GAL)**

Sample Rating Trend



**NORMAL**

**DIAGNOSIS**

**Recommendation**  
 Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is no indication of any contamination in the oil.

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

**SAMPLE INFORMATION**    method    limit/base    current    history1    history2

Sample Number	Client Info		<b>TO10003400</b>	TO10003117	TO10002818
Sample Date	Client Info		<b>04 May 2024</b>	22 Feb 2024	04 Dec 2023
Machine Age	hrs	Client Info	<b>28486</b>	48683	27433
Oil Age	hrs	Client Info	<b>502</b>	48683	3631
Oil Changed		Client Info	<b>Not Changed</b>	Not Changd	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

**CONTAMINATION**    method    limit/base    current    history1    history2

Water	WC Method	>.2	<b>NEG</b>	NEG	NEG
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**WEAR METALS**    method    limit/base    current    history1    history2

PQ		ASTM D8184		<b>71</b>	76	69
Iron	ppm	ASTM D5185m	>500	<b>73</b>	68	69
Chromium	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>13	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>103	<b>8</b>	7	8
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

**ADDITIVES**    method    limit/base    current    history1    history2

Boron	ppm	ASTM D5185m		<b>4</b>	0	<1
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>13</b>	14	14
Calcium	ppm	ASTM D5185m		<b>3377</b>	3185	3120
Phosphorus	ppm	ASTM D5185m		<b>1030</b>	962	957
Zinc	ppm	ASTM D5185m		<b>1184</b>	1179	1191
Sulfur	ppm	ASTM D5185m		<b>5708</b>	4749	4915

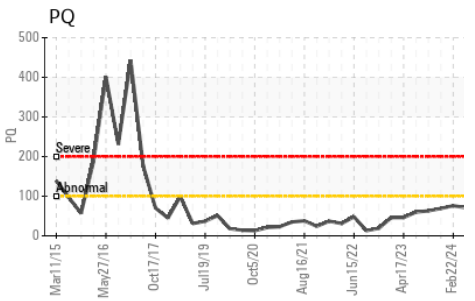
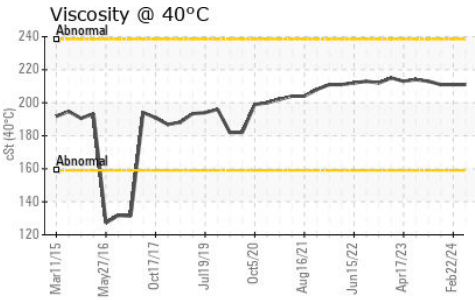
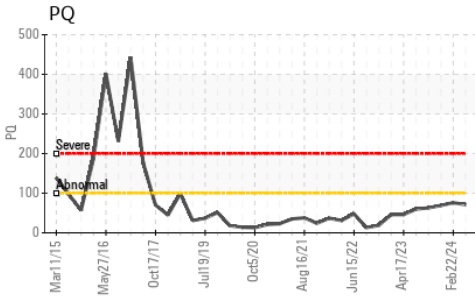
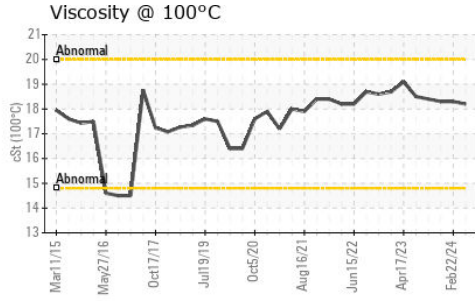
**CONTAMINANTS**    method    limit/base    current    history1    history2

Silicon	ppm	ASTM D5185m	>100	<b>17</b>	14	15
Sodium	ppm	ASTM D5185m		<b>4</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0

**FLUID DEGRADATION**    method    limit/base    current    history1    history2

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.10</b>	1.05	1.59
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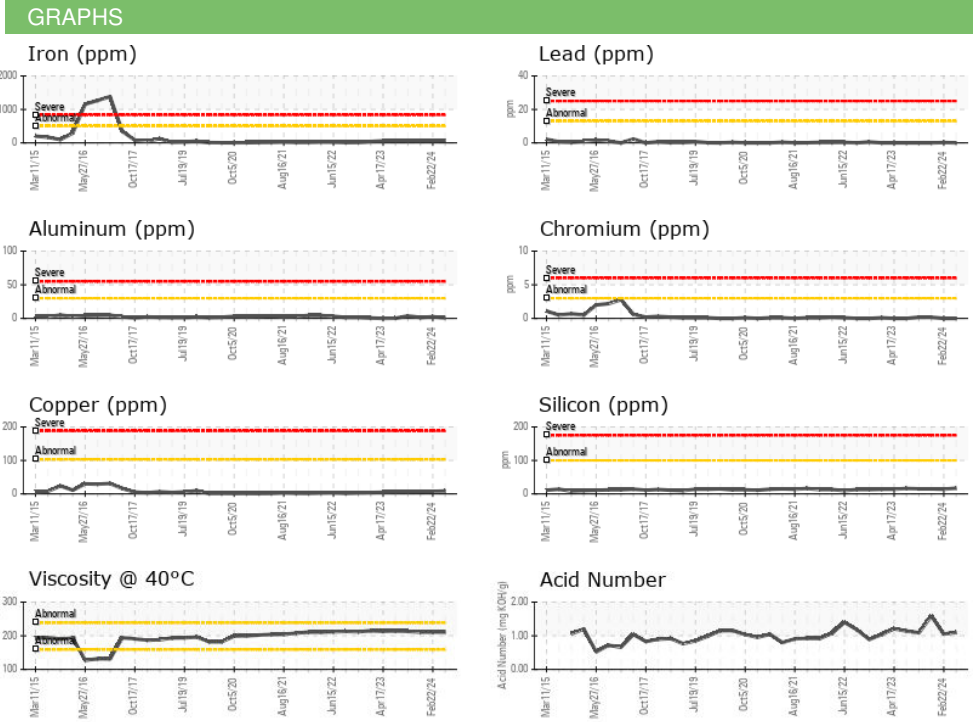
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	211	211	211
Visc @ 100°C	cSt	ASTM D445	18.2	18.3	18.3
Viscosity Index (VI)	Scale	ASTM D2270	94	95	95

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003400 **Received** : 10 May 2024  
**Lab Number** : 06176196 **Tested** : 13 May 2024  
**Unique Number** : 11022249 **Diagnosed** : 13 May 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**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

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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