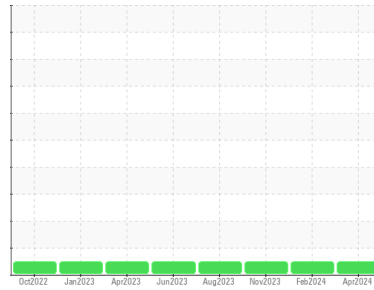


# OIL ANALYSIS REPORT



Machine Id  
**CATERPILLAR 980M 6141 (S/N KRS00885)**  
 Component  
**Front Left Final Drive**  
 Fluid  
**TULCO LUBSOIL TO-4 50 (3 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>TO10003321</b>	TO10002986	TO10002802
Sample Date	Client Info		<b>08 Apr 2024</b>	01 Feb 2024	02 Nov 2023
Machine Age	hrs	Client Info	<b>13425</b>	12901	12384
Oil Age	hrs	Client Info	<b>3623</b>	3099	2582
Oil Changed		Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

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

Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
-------	-----------	------	------------	-----	-----

**WEAR METALS**    method    limit/base    current    history1    history2

PQ		ASTM D8184	>500	<b>201</b>	---	178
Iron	ppm	ASTM D5185m	>800	<b>352</b>	427	378
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	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>2</b>	2	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>17</b>	19	15
Tin	ppm	ASTM D5185m	>8	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

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

Boron	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Barium	ppm	ASTM D5185m		<b>0</b>	5	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	1	2
Manganese	ppm	ASTM D5185m		<b>3</b>	3	3
Magnesium	ppm	ASTM D5185m		<b>15</b>	20	20
Calcium	ppm	ASTM D5185m		<b>2682</b>	2929	2770
Phosphorus	ppm	ASTM D5185m		<b>795</b>	882	950
Zinc	ppm	ASTM D5185m		<b>964</b>	1202	1162
Sulfur	ppm	ASTM D5185m		<b>4620</b>	4893	4581

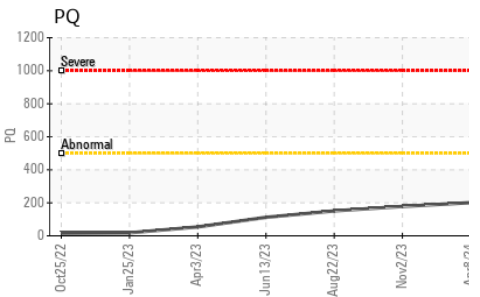
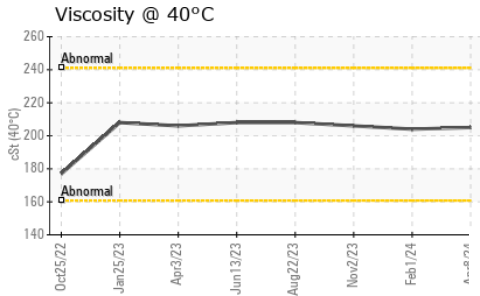
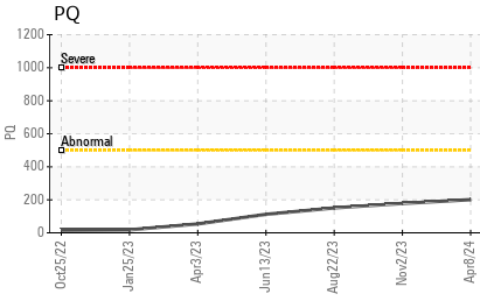
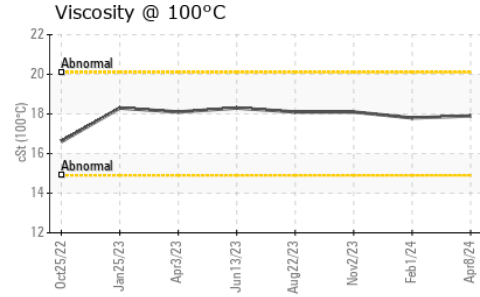
**CONTAMINANTS**    method    limit/base    current    history1    history2

Silicon	ppm	ASTM D5185m	>400	<b>14</b>	16	15
Sodium	ppm	ASTM D5185m		<b>4</b>	0	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0

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

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.60</b>	1.00	0.81
------------------	----------	------------	--	-------------	------	------

# OIL ANALYSIS REPORT

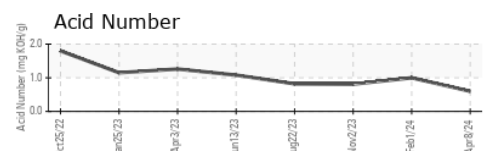
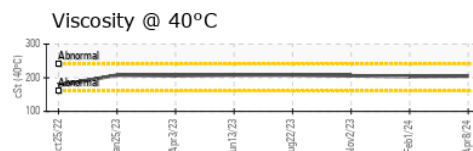
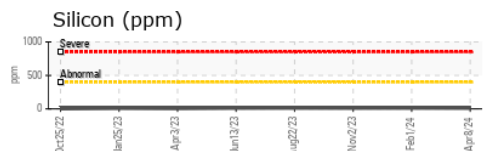
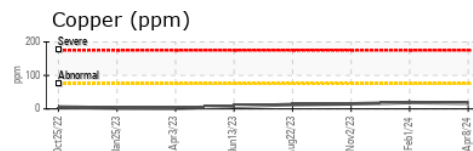
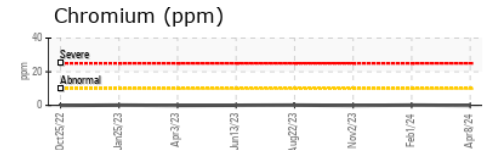
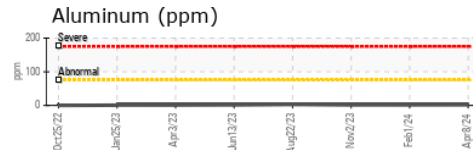
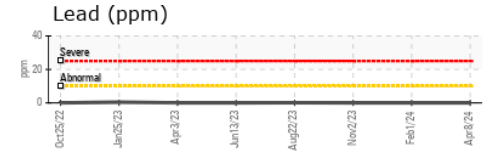
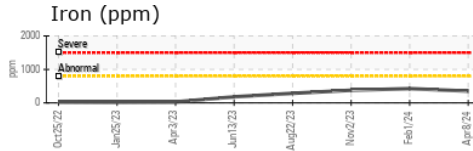


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	205	204	206
Visc @ 100°C	cSt	ASTM D445	17.9	17.8	18.1
Viscosity Index (VI)	Scale	ASTM D2270	95	94	96

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003321 **Received** : 15 Apr 2024  
**Lab Number** : 06149571 **Tested** : 16 Apr 2024  
**Unique Number** : 10979649 **Diagnosed** : 16 Apr 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)