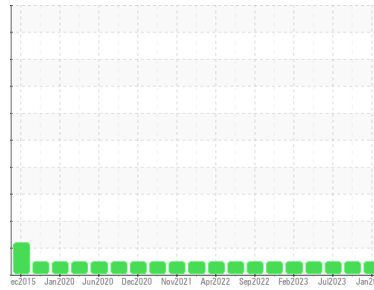


# OIL ANALYSIS REPORT



Area  
**DE Samples - CAT LAB**  
 Machine Id  
**CATERPILLAR 980H LOADER 6583 (S/N JMS05055)**  
 Component  
**Front Right Final Drive**  
 Fluid  
**TULCO LUBSOIL TO-4 50 (--- 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>TO10003057</b>	TO10002751	TO10002045
Sample Date	Client Info		<b>08 Jan 2024</b>	02 Oct 2023	14 Jul 2023
Machine Age	hrs	Client Info	<b>34718</b>	34179	33615
Oil Age	hrs	Client Info	<b>3115</b>	2576	2012
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
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>41</b>	36	34	
Iron	ppm	ASTM D5185m	>800	<b>30</b>	29	24
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	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>75	<b>4</b>	3	1
Tin	ppm	ASTM D5185m	>8	<b>0</b>	<1	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>0</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>13</b>	12	12
Calcium	ppm	ASTM D5185m		<b>3275</b>	3146	3707
Phosphorus	ppm	ASTM D5185m		<b>951</b>	965	1020
Zinc	ppm	ASTM D5185m		<b>1187</b>	1195	1328
Sulfur	ppm	ASTM D5185m		<b>4744</b>	4847	6548

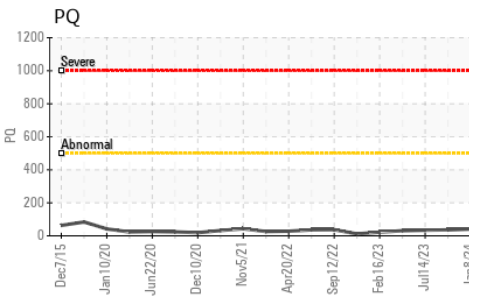
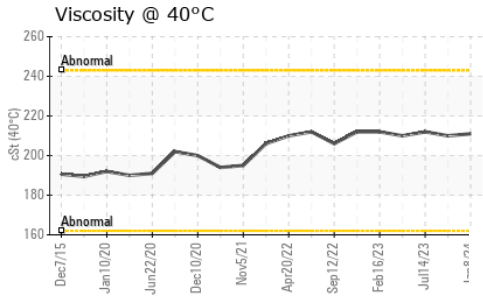
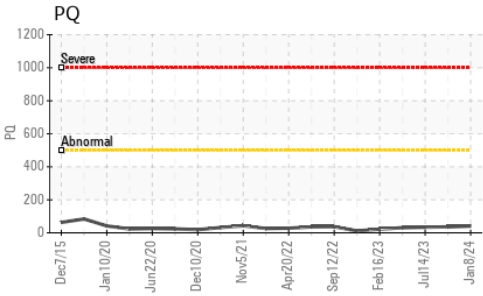
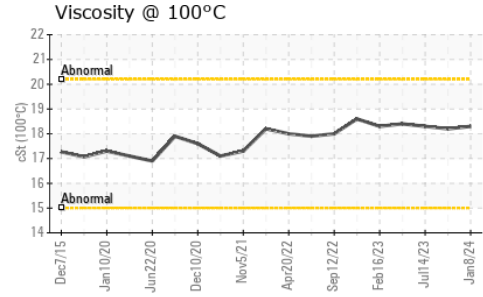
## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>400	<b>15</b>	16	15
Sodium	ppm	ASTM D5185m		<b>1</b>	5	4
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>1.22</b>	1.10	1.29

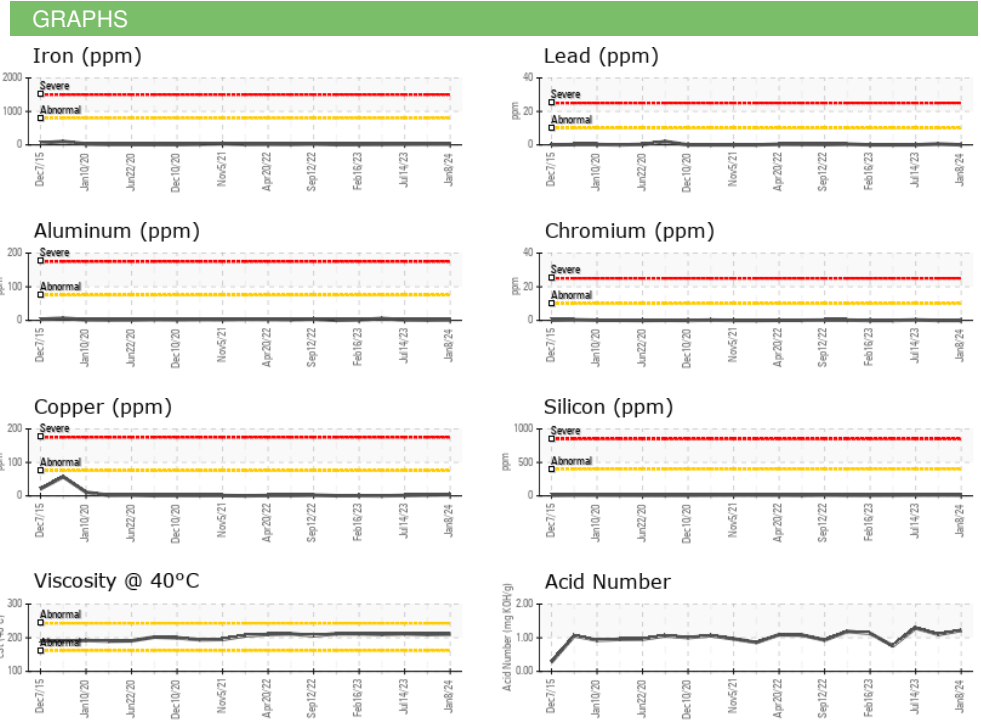
# OIL ANALYSIS REPORT



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	211	210	212
Visc @ 100°C	cSt	ASTM D445	18.3	18.2	18.3
Viscosity Index (VI)	Scale	ASTM D2270	95	95	95

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003057  
**Lab Number** : 06061343  
**Unique Number** : 10832725  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )  
**Received** : 16 Jan 2024  
**Tested** : 18 Jan 2024  
**Diagnosed** : 18 Jan 2024 - Wes Davis

**ANCHOR STONE TULSA ROCK**  
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE  
 TULSA, OK  
 US 74137  
 Contact: MIKE SNYDER  
 msnyder@anchorstoneco.com

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)