



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 980H LOADER 6583 (S/N JMS05055)**  
Component  
**Transmission (Manual)**  
Fluid  
**TULCO LUBSOIL TO-4 30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10003054</b>	TO10002730	TO10002309
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>1103</b>	564	1005
Filter Age	hrs	Client Info		<b>539</b>	564	486
Oil Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>95	<b>10</b>	15	11
Iron	ppm	ASTM D5185m	>200	<b>3</b>	5	7
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>45	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>225	<b>7</b>	4	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

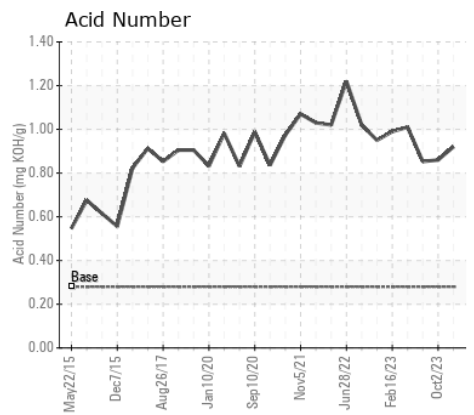
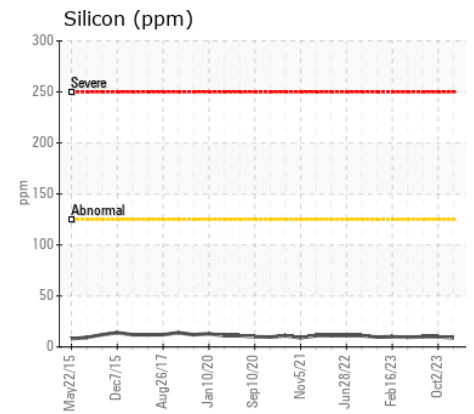
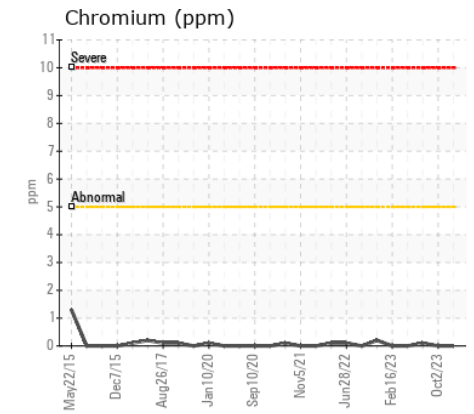
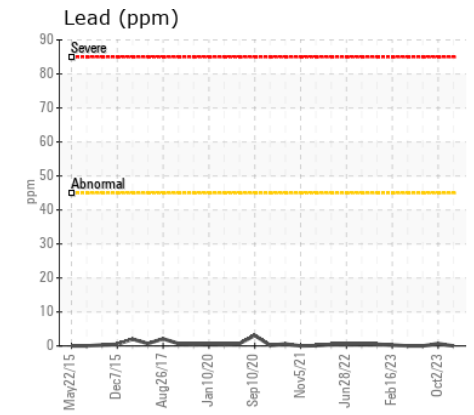
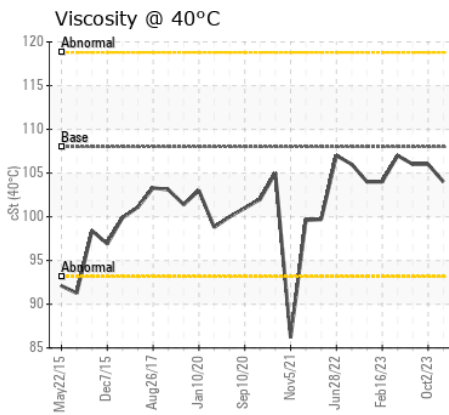
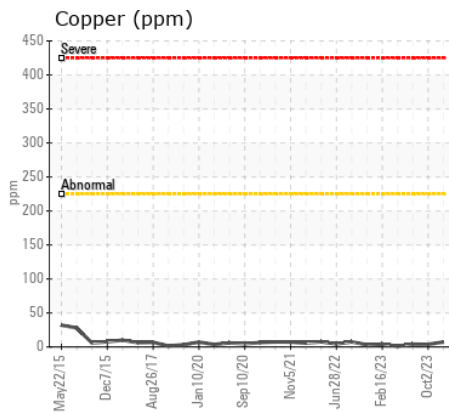
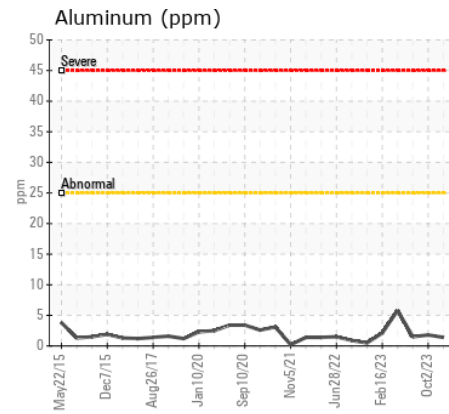
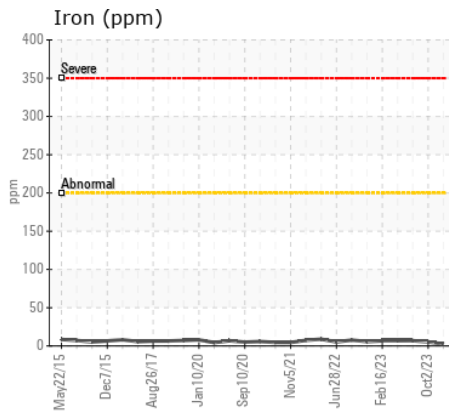
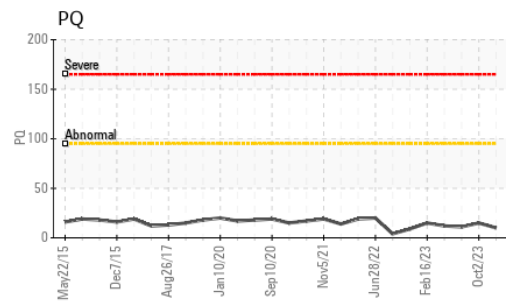
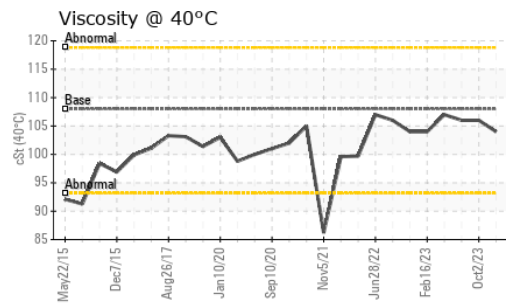
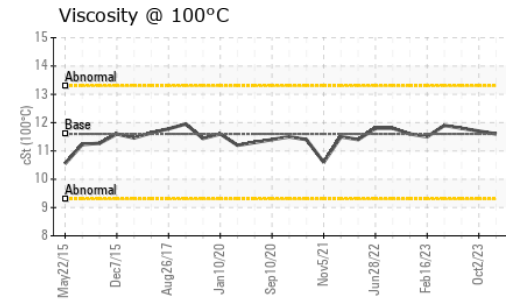
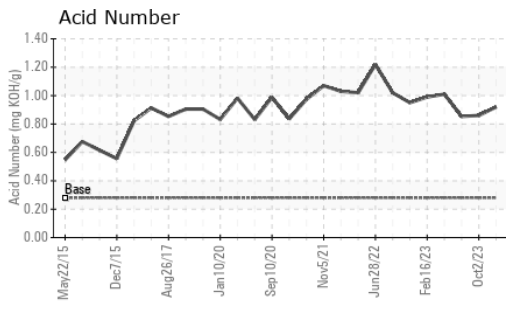
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>125	<b>9</b>	10	10
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>0.1	<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	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	6	4
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	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	9	<b>22</b>	12	9
Calcium	ppm	ASTM D5185m	4500	<b>2982</b>	2760	3308
Phosphorus	ppm	ASTM D5185m	1150	<b>881</b>	864	928
Zinc	ppm	ASTM D5185m	1250	<b>1076</b>	1077	1205
Sulfur	ppm	ASTM D5185m	4500	<b>3909</b>	4071	5360
Acid Number (AN)	mg KOH/g	ASTM D8045	0.28	<b>0.92</b>	0.86	0.853
Visc @ 40°C	cSt	ASTM D445	108	<b>104</b>	106	106
Visc @ 100°C	cSt	ASTM D445	11.6	<b>11.6</b>	11.7	11.8
Viscosity Index (VI)	Scale	ASTM D2270	94	<b>98</b>	97	99



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003054 **Received** : 16 Jan 2024  
**Lab Number** : 06061350 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10832732 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**ANCHOR STONE TULSA ROCK**  
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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)