



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 980 H LOADER 6737 (S/N JMS01810)**  
 Component  
**Rear Left Final Drive**  
 Fluid  
**TULCO LUBSOIL TO-4 50 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10003625</b>	TO10003002	TO10002422
Sample Date		Client Info		<b>13 Jun 2024</b>	15 Dec 2023	31 Jul 2023
Machine Age	hrs	Client Info		<b>31038</b>	30731	30299
Oil Age	hrs	Client Info		<b>2421</b>	2114	1612
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>N/A</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184	>500	<b>26</b>	23	24
Iron	ppm	ASTM D5185m	>800	<b>21</b>	14	14
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>75	<b>3</b>	<1	2
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

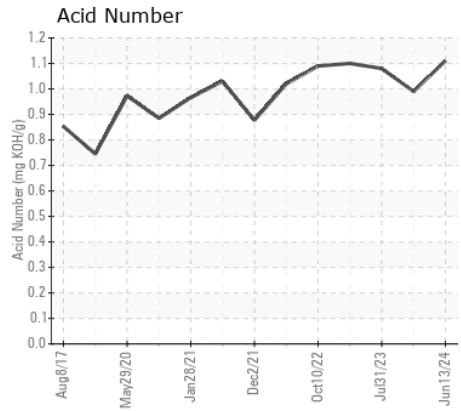
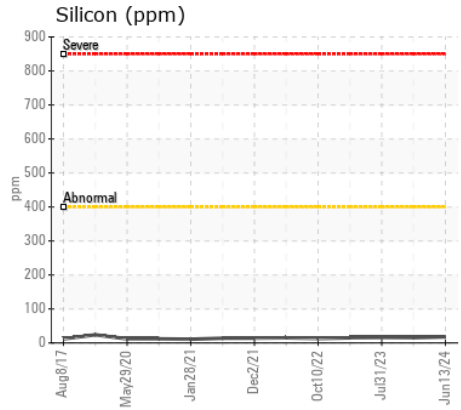
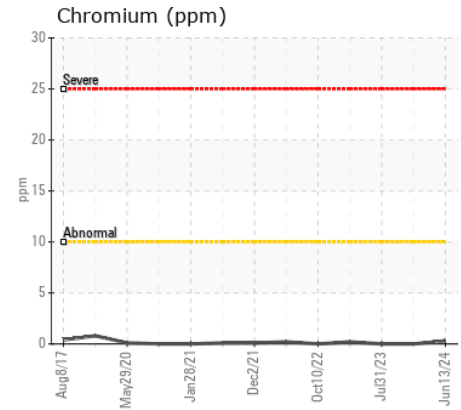
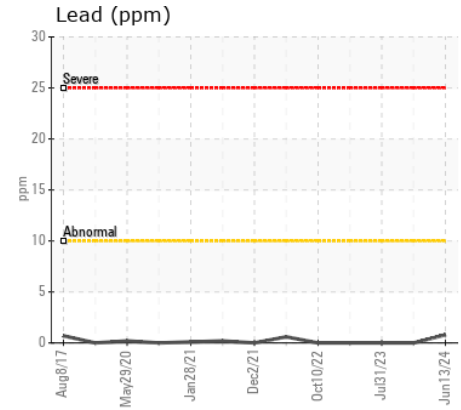
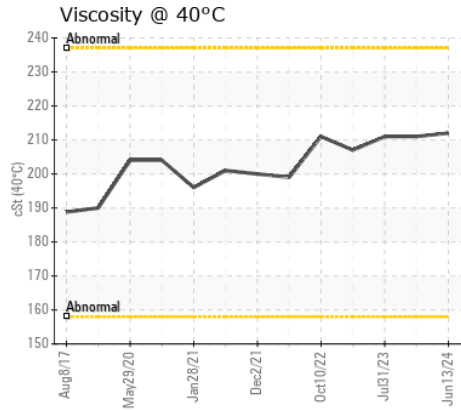
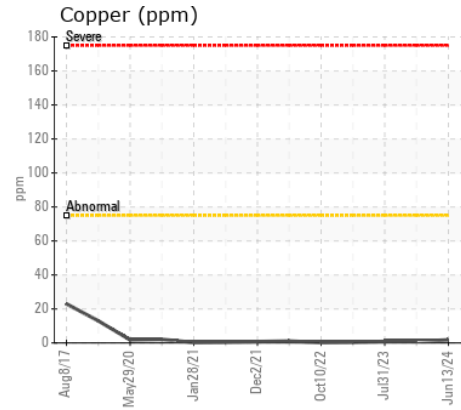
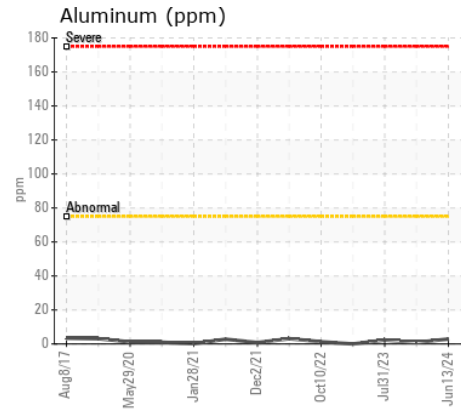
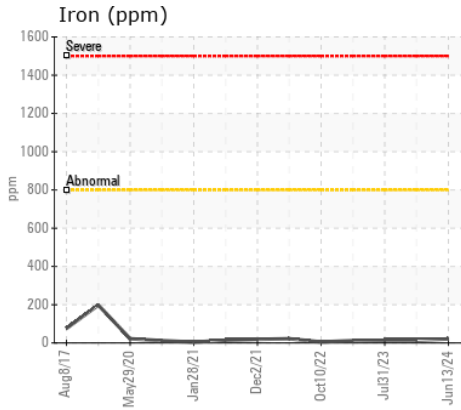
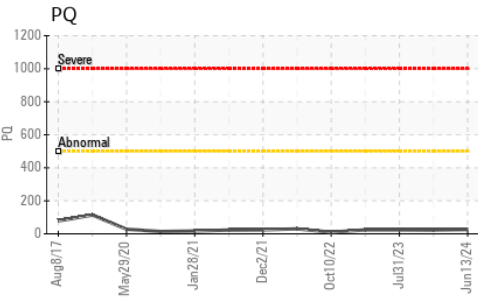
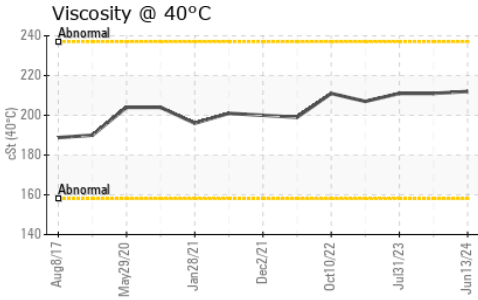
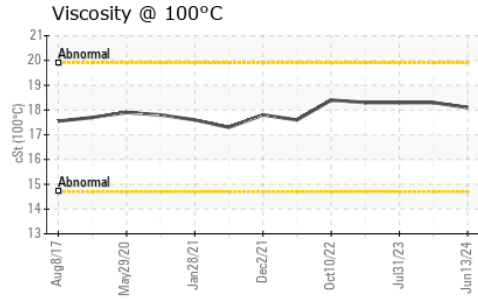
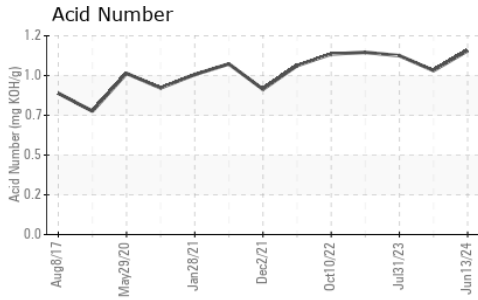
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>18</b>	15	16
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	1
Water		WC Method	>0.2	<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	>0.2	<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>0</b>	3	0
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>11</b>	11	11
Calcium	ppm	ASTM D5185m		<b>3404</b>	2883	3399
Phosphorus	ppm	ASTM D5185m		<b>1062</b>	912	997
Zinc	ppm	ASTM D5185m		<b>1220</b>	1077	1218
Sulfur	ppm	ASTM D5185m		<b>5281</b>	4475	5389
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.11</b>	0.99	1.08
Visc @ 40°C	cSt	ASTM D445		<b>212</b>	211	211
Visc @ 100°C	cSt	ASTM D445		<b>18.1</b>	18.3	18.3
Viscosity Index (VI)	Scale	ASTM D2270		<b>93</b>	95	95



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003625  
**Lab Number** : 06217393  
**Unique Number** : 11090257  
**Test Package** : MOB 2 ( Additional Tests: KV100, PQ, VI )

**Received** : 21 Jun 2024  
**Tested** : 24 Jun 2024  
**Diagnosed** : 24 Jun 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)

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F: