



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**CATERPILLAR 730 WATER TRK 6019 (S/N B1M03182)**  
Component  
**Gearbox**  
Fluid  
**TULCO LUBSOIL TO-4 30 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10003052</b>	TO10002330	TO10001414
Sample Date		Client Info		<b>08 Jan 2024</b>	26 Jun 2023	28 Jul 2022
Machine Age	hrs	Client Info		<b>11612</b>	11087	10412
Oil Age	hrs	Client Info		<b>525</b>	1080	488
Filter Age	hrs	Client Info		<b>525</b>	592	488
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>18</b>	12	22
Iron	ppm	ASTM D5185m	>200	<b>2</b>	9	21
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	2
Lead	ppm	ASTM D5185m	>50	<b>3</b>	19	▲ 71
Copper	ppm	ASTM D5185m	>200	<b>4</b>	14	37
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	2
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

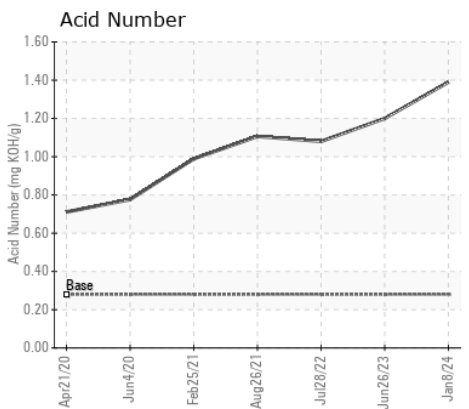
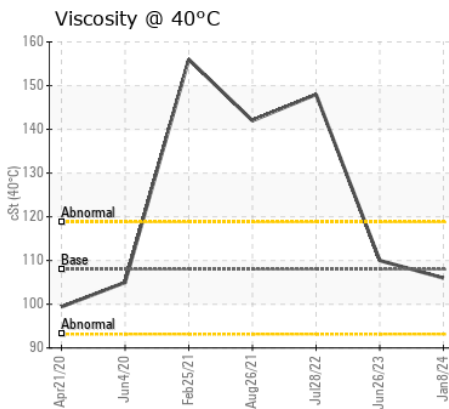
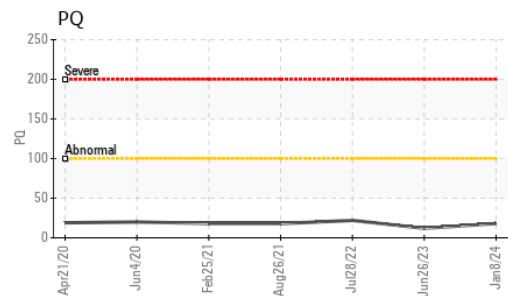
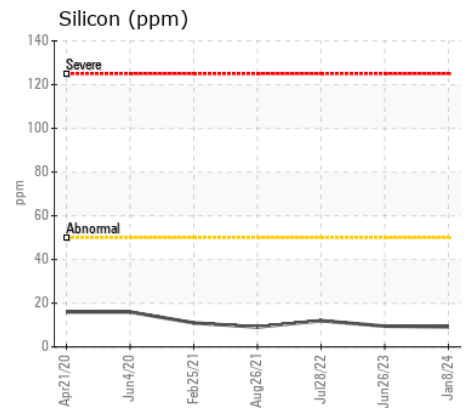
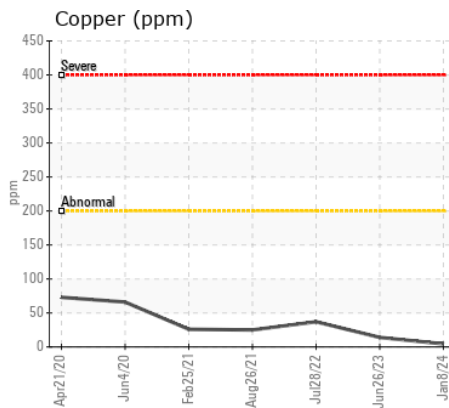
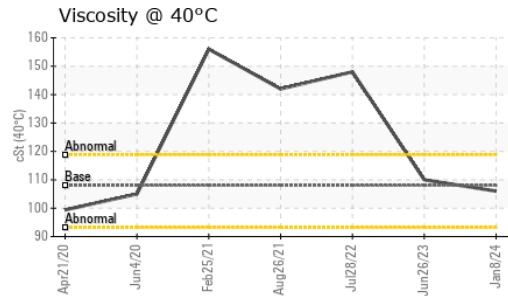
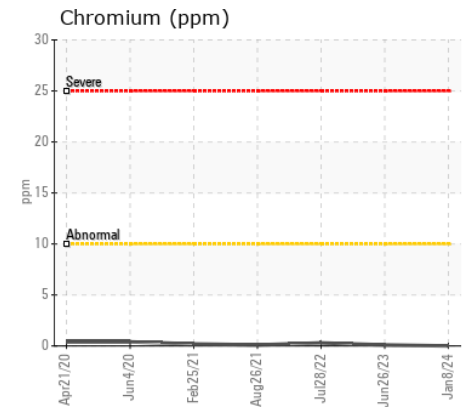
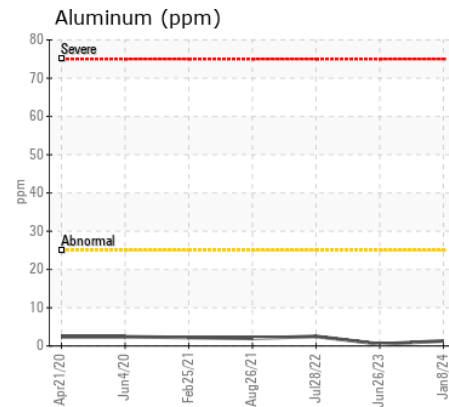
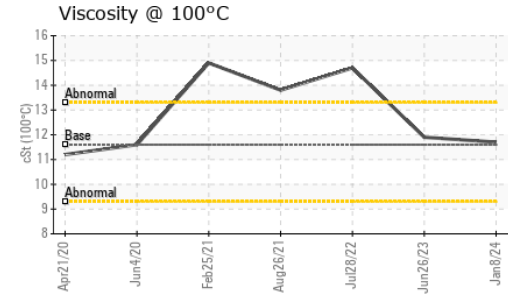
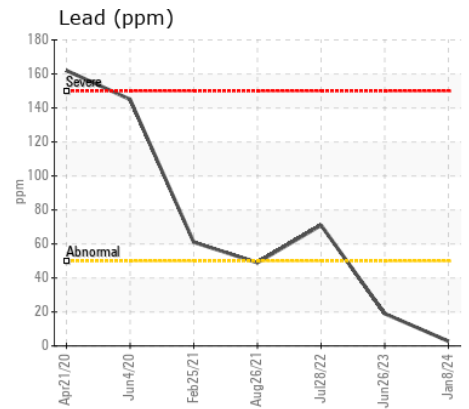
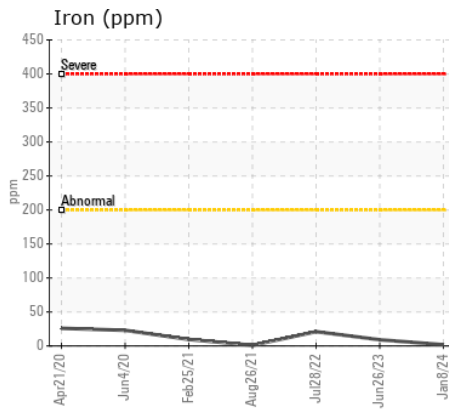
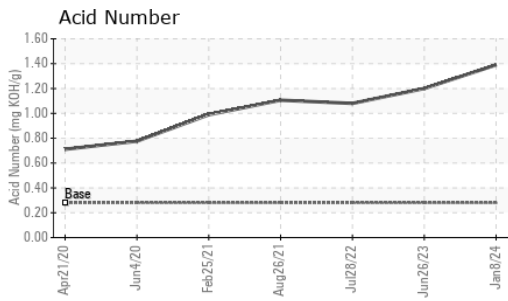
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>9</b>	10	12
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
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>8</b>	5	7
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>	<1	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	9	<b>12</b>	11	13
Calcium	ppm	ASTM D5185m	4500	<b>2531</b>	2666	2620
Phosphorus	ppm	ASTM D5185m	1150	<b>856</b>	911	783
Zinc	ppm	ASTM D5185m	1250	<b>1064</b>	1177	1001
Sulfur	ppm	ASTM D5185m	4500	<b>3802</b>	5185	4494
Acid Number (AN)	mg KOH/g	ASTM D8045	0.28	<b>1.39</b>	1.20	1.08
Visc @ 40°C	cSt	ASTM D445	108	<b>106</b>	110	▲ 148
Visc @ 100°C	cSt	ASTM D445	11.6	<b>11.7</b>	11.9	▲ 14.7
Viscosity Index (VI)	Scale	ASTM D2270	94	<b>97</b>	96	98



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO10003052 **Received** : 16 Jan 2024  
**Lab Number** : 06061336 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10832718 **Diagnostician** : Jonathan Hester  
**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)