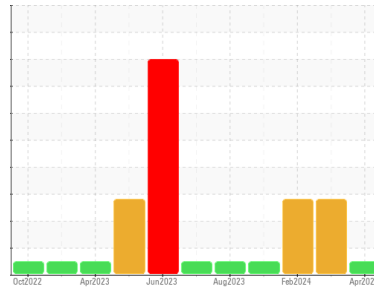


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR 980M 6141 (S/N KRS00885)
Component
Rear Differential
Fluid
TULCO LUBSOIL TO-4 50 (17 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		TO10003324	TO10003375	TO10002968
Sample Date	Client Info		08 Apr 2024	04 Mar 2024	01 Feb 2024
Machine Age	hrs	Client Info	13425	13158	12901
Oil Age	hrs	Client Info	267	1685	1428
Oil Changed	Client Info		Not Changed	Changed	Not Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		54	▲ 439	▲ 449
Iron	ppm	ASTM D5185m >500	52	▲ 539	▲ 635
Chromium	ppm	ASTM D5185m >3	0	<1	<1
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >2	0	<1	0
Silver	ppm	ASTM D5185m >2	0	<1	0
Aluminum	ppm	ASTM D5185m >30	<1	8	5
Lead	ppm	ASTM D5185m >13	0	3	0
Copper	ppm	ASTM D5185m >103	5	51	56
Tin	ppm	ASTM D5185m >5	0	1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1
Barium	ppm	ASTM D5185m	0	0	5
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	<1	6	5
Magnesium	ppm	ASTM D5185m	7	14	16
Calcium	ppm	ASTM D5185m	2928	2736	3111
Phosphorus	ppm	ASTM D5185m	826	881	925
Zinc	ppm	ASTM D5185m	1014	995	1185
Sulfur	ppm	ASTM D5185m	4714	4909	5336

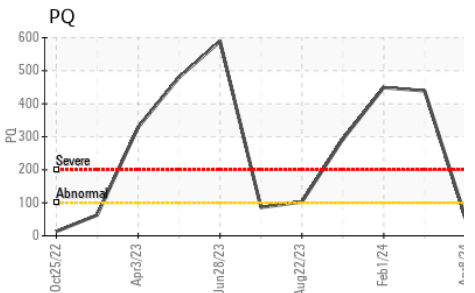
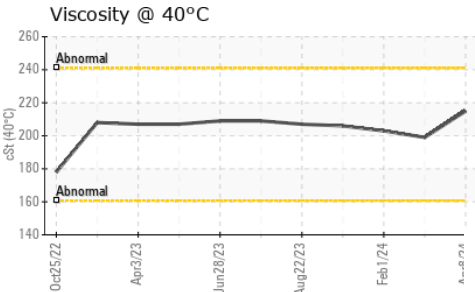
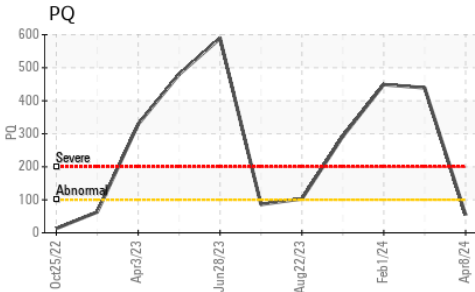
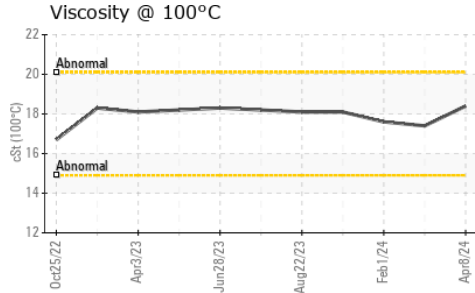
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	12	15	17
Sodium	ppm	ASTM D5185m	6	5	0
Potassium	ppm	ASTM D5185m >20	0	3	2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.12	0.58	0.63

OIL ANALYSIS REPORT



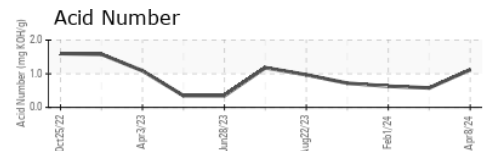
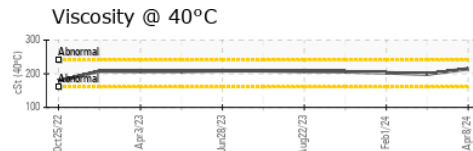
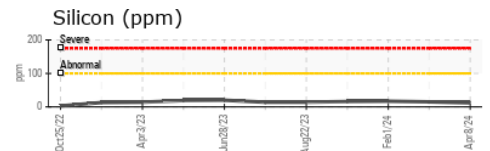
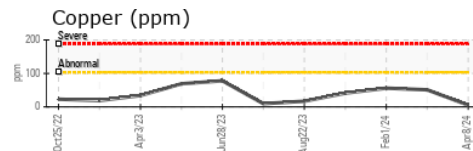
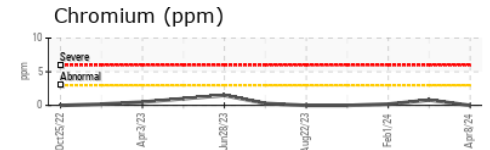
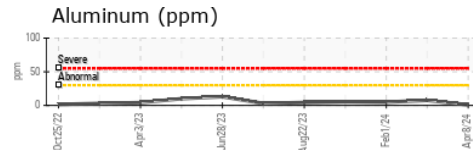
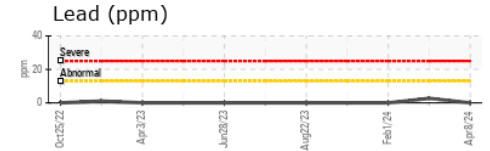
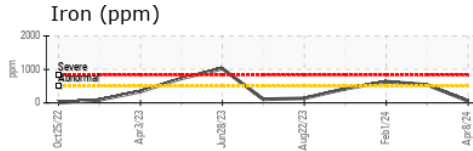
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	215	199	203
Visc @ 100°C	cSt	ASTM D445	18.4	17.4	17.6
Viscosity Index (VI)	Scale	ASTM D2270	94	93	93

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. : TO10003324
Lab Number : 06149569
Unique Number : 10979647
Test Package : MOB 2 (Additional Tests: KV100, PQ, VI)

Received : 15 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 16 Apr 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
 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)