



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
KEMP QUARRIES / SELIGMAN [65165]
Machine Id
CATERPILLAR OHT114
Component
Rear Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 sampled fluid)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0109071	PCA0086067	PCA0037562
Sample Date		Client Info		11 Mar 2024	05 Apr 2023	15 Apr 2022
Machine Age	hrs	Client Info		37902	37377	36878
Oil Age	hrs	Client Info		37902	37377	36878
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	121	59	52
Chromium	ppm	ASTM D5185m	>3	1	<1	<1
Nickel	ppm	ASTM D5185m	>3	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	5	4	2
Lead	ppm	ASTM D5185m	>13	3	<1	1
Copper	ppm	ASTM D5185m	>103	28	13	4
Tin	ppm	ASTM D5185m	>5	2	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	● MODER	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

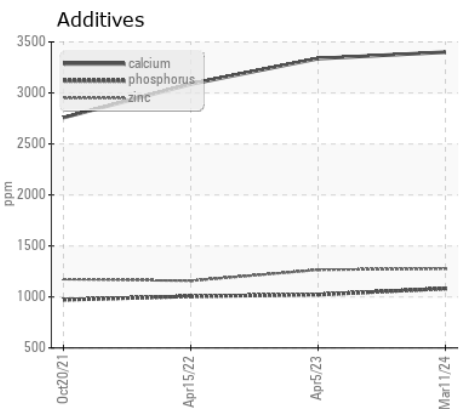
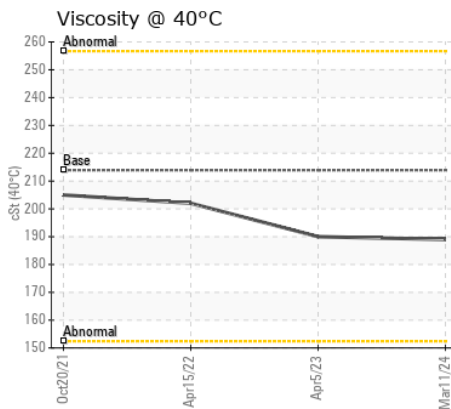
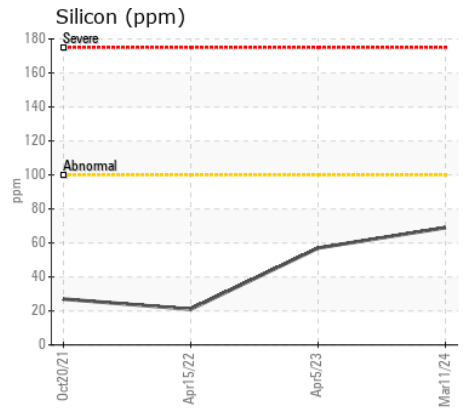
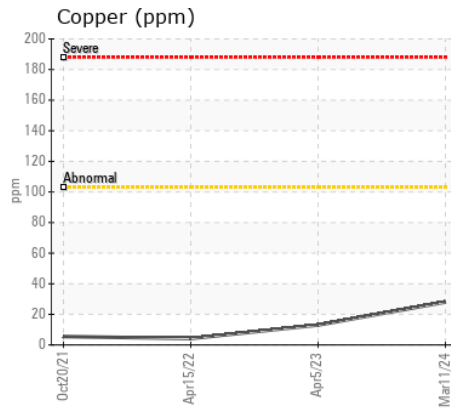
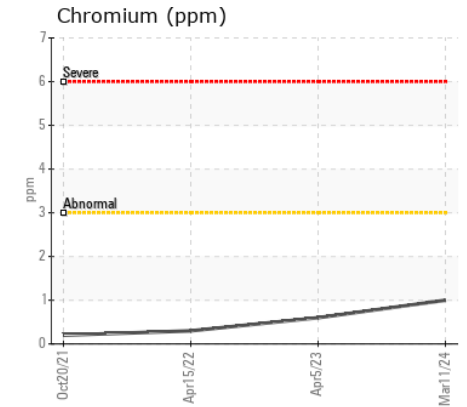
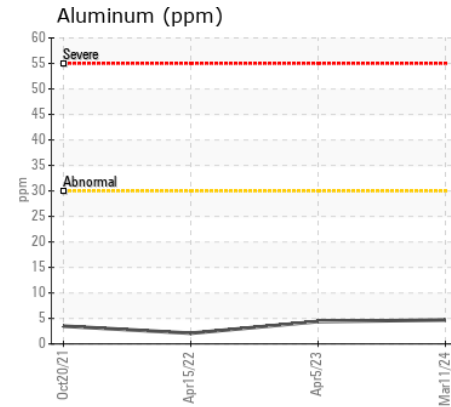
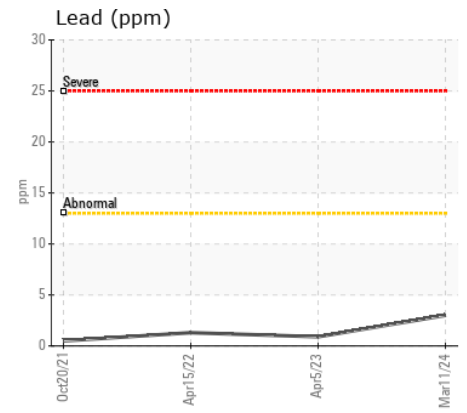
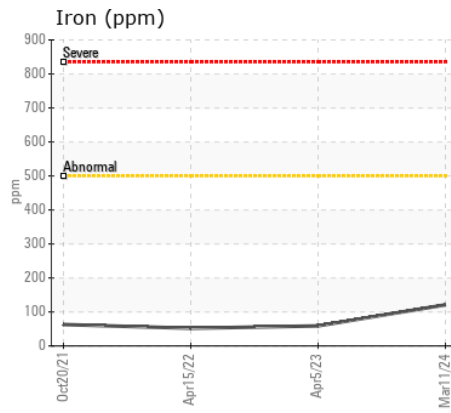
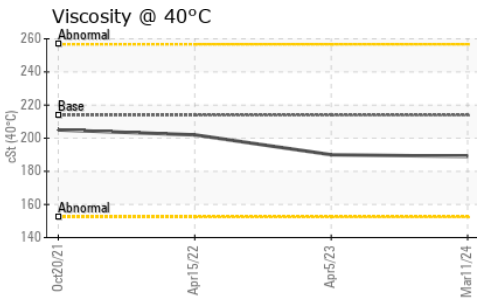
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	69	57	21
Potassium	ppm	ASTM D5185m	>20	4	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	0.2%	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		1	3	<1
Boron	ppm	ASTM D5185m	2	1	0	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m	0	2	1	<1
Magnesium	ppm	ASTM D5185m	9	17	20	16
Calcium	ppm	ASTM D5185m	3114	3400	3337	3086
Phosphorus	ppm	ASTM D5185m	1099	1082	1023	1006
Zinc	ppm	ASTM D5185m	1245	1277	1266	1158
Sulfur	ppm	ASTM D5185m	7086	4717	5205	4288
Visc @ 40°C	cSt	ASTM D445	213.9	189	190	202



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0109071

Lab Number : 06121811

Unique Number : 10935962

Test Package : MOB 1

Received : 18 Mar 2024

Tested : 19 Mar 2024

Diagnosed : 21 Mar 2024 - Jonathan Hester

Kemp Quarries - BCS - Seligman

8261 Farm rd 2295

Seligman, MO

US 65745

Contact: TECHNICIAN ACCOUNT

catherine.anastasio@wearcheck.com

T:

F:

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)