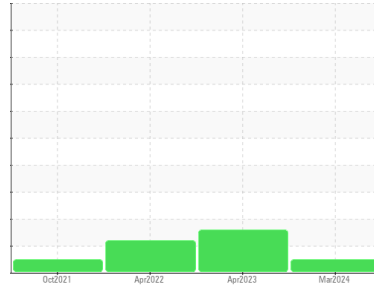


OIL ANALYSIS REPORT



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

Sample Rating Trend



NORMAL

DIAGNOSIS

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

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0109069	PCA0086066	PCA0037560
Sample Date	Client Info	11 Mar 2024	05 Apr 2023	15 Apr 2022
Machine Age	hrs	37902	37377	36878
Oil Age	hrs	37902	31377	36878
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	ABNORMAL	ATTENTION

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >800	122	58	50
Chromium	ppm ASTM D5185m >10	<1	<1	<1
Nickel	ppm ASTM D5185m >5	<1	0	<1
Titanium	ppm ASTM D5185m >15	1	<1	<1
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >75	4	4	2
Lead	ppm ASTM D5185m >10	3	<1	1
Copper	ppm ASTM D5185m >75	28	13	4
Tin	ppm ASTM D5185m >8	2	<1	<1
Antimony	ppm ASTM D5185m >50	---	---	---
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
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	18
Calcium	ppm ASTM D5185m 3114	3374	3342	3076
Phosphorus	ppm ASTM D5185m 1099	1069	1027	1012
Zinc	ppm ASTM D5185m 1245	1269	1267	1156
Sulfur	ppm ASTM D5185m 7086	4659	5278	4305

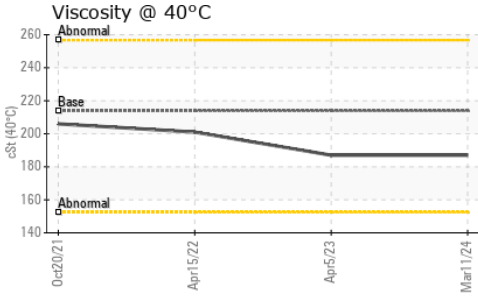
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >400	69	55	21
Sodium	ppm ASTM D5185m	1	3	<1
Potassium	ppm ASTM D5185m >20	4	1	0

VISUAL

method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	NONE	MODER	HEAVY
Yellow Metal	scalar *Visual NONE	NONE	NONE	NONE
Precipitate	scalar *Visual NONE	NONE	NONE	NONE
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 >0.2	NEG	0.2%	NEG
Free Water	scalar *Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

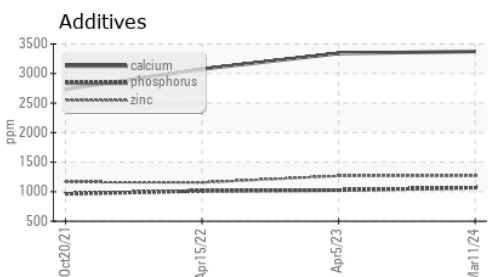
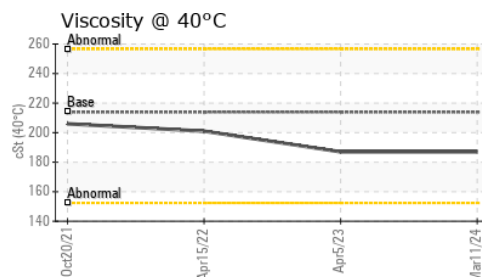
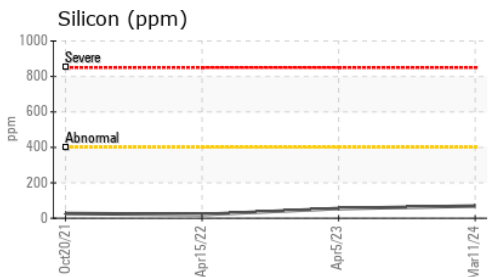
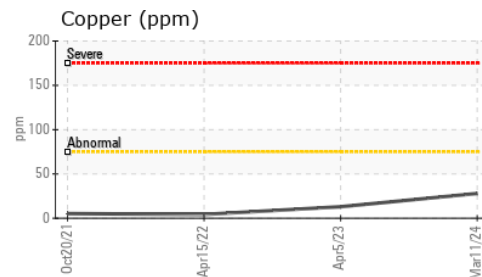
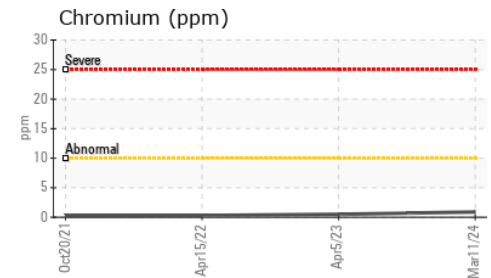
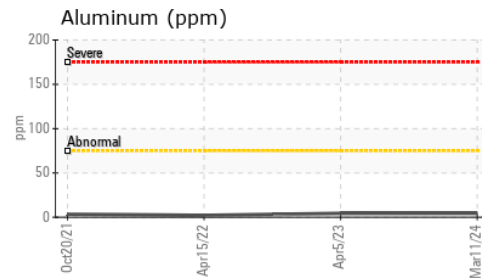
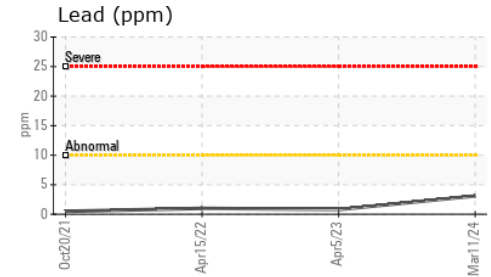
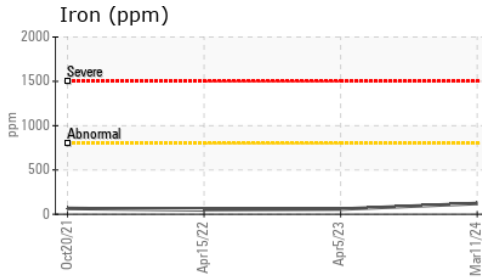


FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	213.9	187	187	201

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109069
Lab Number : 06121839
Unique Number : 10935990
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

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)

T:
F: