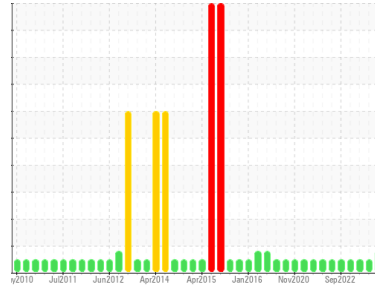


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY ARKOMA
 Machine Id
WL049
 Component
Rear Right Final Drive
 Fluid
MOBIL MOBILUBE HD PLUS 80W90 (--- GAL)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**
The copper level is abnormal. All other 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	PCA0034678	PCA0070351	PCA0070379
Sample Date	Client Info	04 Aug 2023	23 Mar 2023	02 Dec 2022
Machine Age	hrs	4581	4603	1753
Oil Age	hrs	1000	4603	1753
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >800	347	318	357
Chromium	ppm	ASTM D5185m >10	0	0	<1
Nickel	ppm	ASTM D5185m >5	<1	0	0
Titanium	ppm	ASTM D5185m >15	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	1
Aluminum	ppm	ASTM D5185m >75	3	3	4
Lead	ppm	ASTM D5185m >10	8	7	7
Copper	ppm	ASTM D5185m >75	▲ 86	76	77
Tin	ppm	ASTM D5185m >8	6	5	4
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	114	95	113
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	4	4	4
Magnesium	ppm	ASTM D5185m	6	9	6
Calcium	ppm	ASTM D5185m	36	167	205
Phosphorus	ppm	ASTM D5185m	1068	945	1044
Zinc	ppm	ASTM D5185m	41	95	112
Sulfur	ppm	ASTM D5185m	25056	23331	25671

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >400	21	20	19
Sodium	ppm	ASTM D5185m	1	0	0
Potassium	ppm	ASTM D5185m >20	<1	0	2

VISUAL

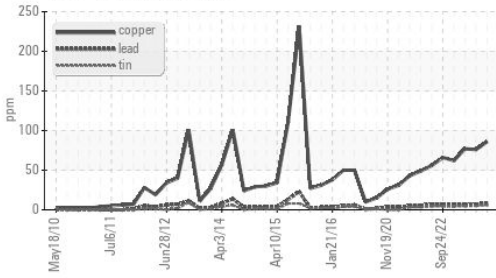
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual NONE	NONE	MODER	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 139	138	138	140

OIL ANALYSIS REPORT

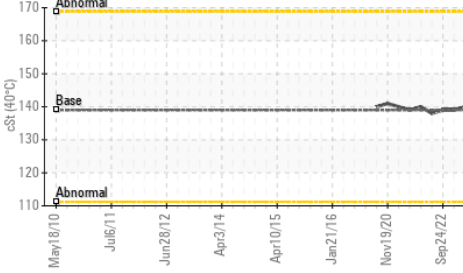
▲ Non-ferrous Metals



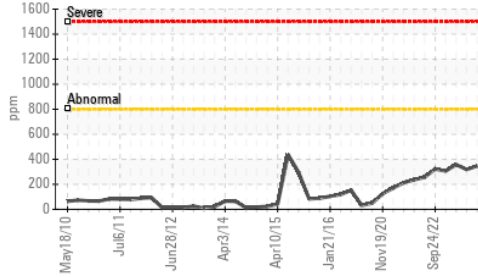
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

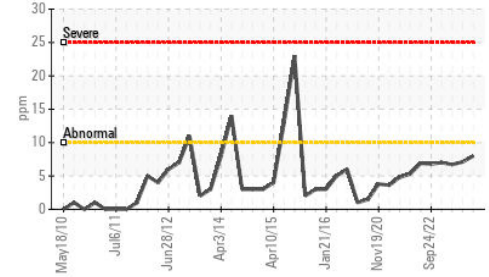
Viscosity @ 40°C



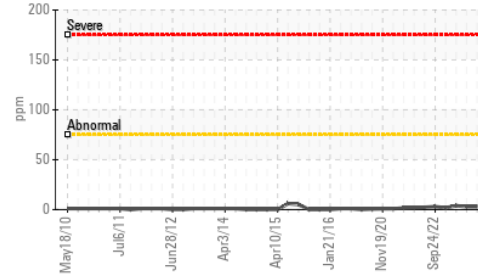
Iron (ppm)



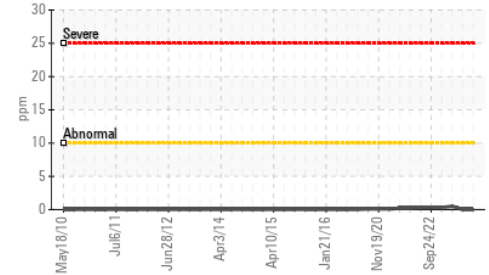
Lead (ppm)



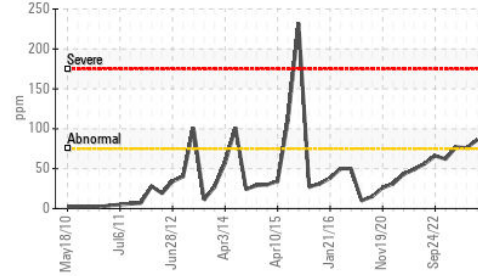
Aluminum (ppm)



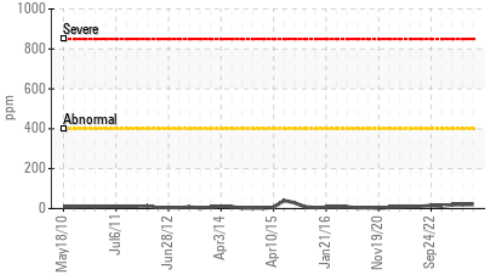
Chromium (ppm)



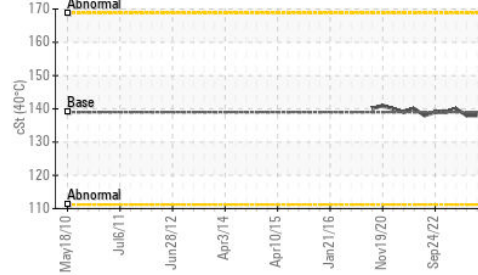
▲ Copper (ppm)



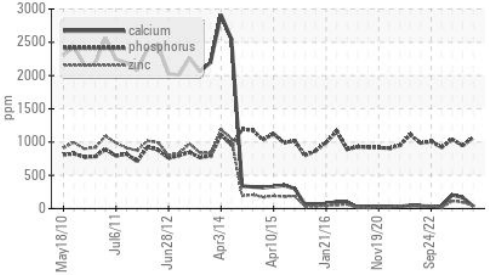
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0034678 **Received** : 09 Aug 2023
Lab Number : 05920380 **Diagnosed** : 10 Aug 2023
Unique Number : 10592294 **Diagnostician** : Sean Felton
Test Package : MOB 1

Kemp Quarries - River Valley - Arkoma
 12971 HWY 9a
 Shawnee, OK
 US 74804
 Contact:

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)

arkomashop@kempquarries.net

T:
F: