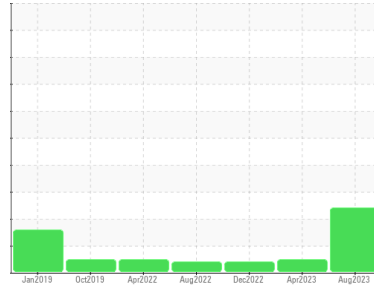


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
KEMP QUARRIES / RIVER VALLEY ARKOMA
 Machine Id
OHT102
 Component
Front Differential
 Fluid
MOBIL MOBILUBE HD 80W90 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Bearing and/or bushing wear is indicated.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0083936	PCA0070400	PCA0070469
Sample Date	Client Info	22 Aug 2023	20 Apr 2023	09 Dec 2022
Machine Age	hrs	29115	28531	27903
Oil Age	hrs	29115	27903	27510
Oil Changed	Client Info	Not Changed	Changed	Not Changed
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >500	142	292	253
Chromium	ppm ASTM D5185m >10	<1	2	2
Nickel	ppm ASTM D5185m >10	<1	<1	0
Titanium	ppm ASTM D5185m	<1	<1	<1
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >25	<1	0	4
Lead	ppm ASTM D5185m >25	2	0	0
Copper	ppm ASTM D5185m >100	▲ 151	89	47
Tin	ppm ASTM D5185m >10	5	3	2
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	89	213	212
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	2	14	14
Manganese	ppm ASTM D5185m	1	2	2
Magnesium	ppm ASTM D5185m	4	3	<1
Calcium	ppm ASTM D5185m	▲ 3430	18	23
Phosphorus	ppm ASTM D5185m	928	1008	975
Zinc	ppm ASTM D5185m	▲ 1076	19	20
Sulfur	ppm ASTM D5185m	▲ 6645	21118	23992

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >75	18	9	12
Sodium	ppm ASTM D5185m	<1	<1	<1
Potassium	ppm ASTM D5185m >20	2	1	0

VISUAL

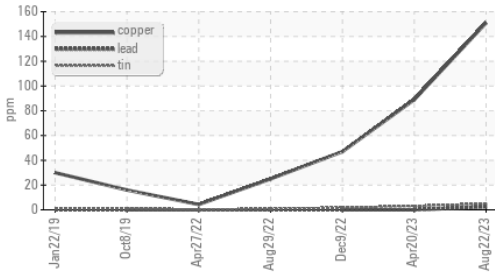
method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	NONE	NONE	MODER
Yellow Metal	scalar *Visual NONE	NONE	MODER	NONE
Precipitate	scalar *Visual NONE	NONE	NONE	NONE
Silt	scalar *Visual NONE	NONE	NONE	NONE
Debris	scalar *Visual NONE	▲ MODER	NONE	▲ MODER
Sand/Dirt	scalar *Visual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

FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 136	190	138	138

OIL ANALYSIS REPORT

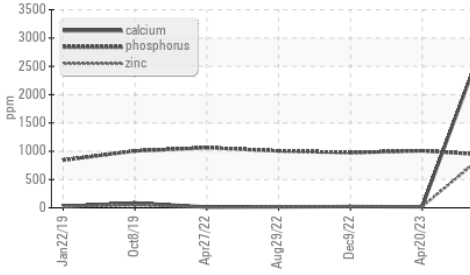
▲ Non-ferrous Metals



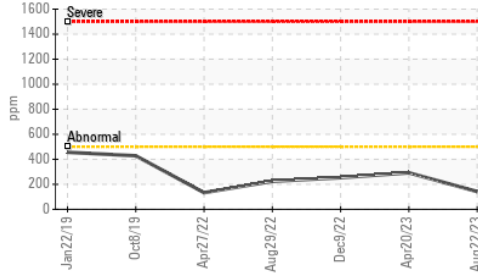
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

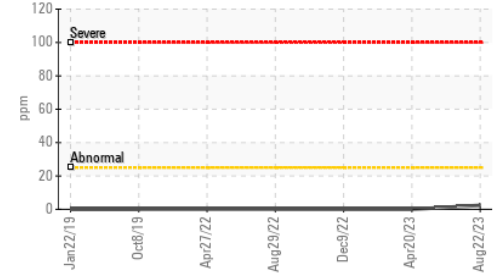
▲ Additives



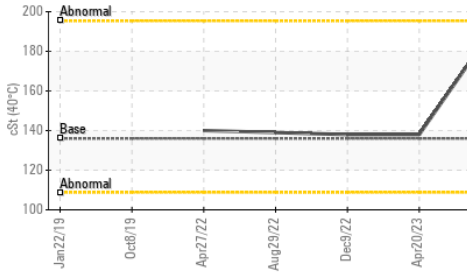
Iron (ppm)



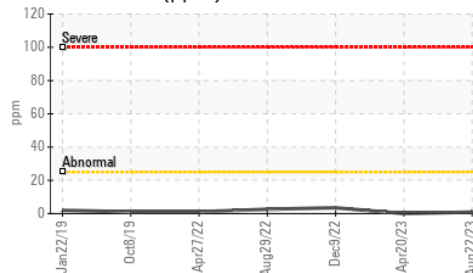
Lead (ppm)



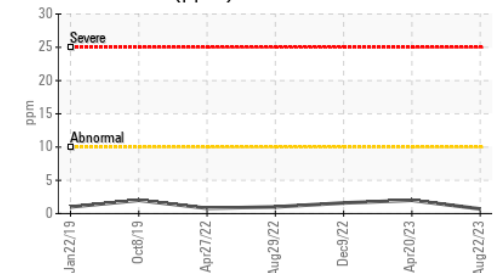
Viscosity @ 40°C



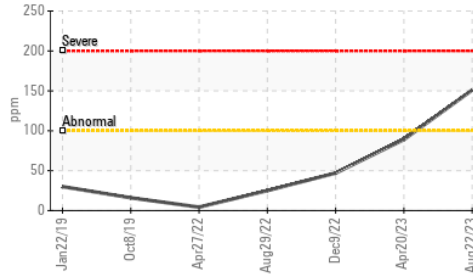
Aluminum (ppm)



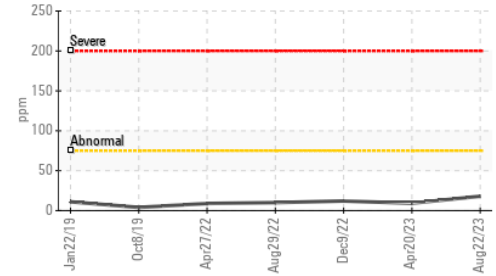
Chromium (ppm)



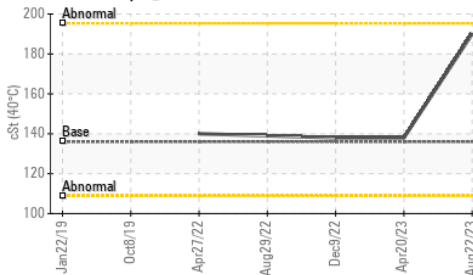
▲ Copper (ppm)



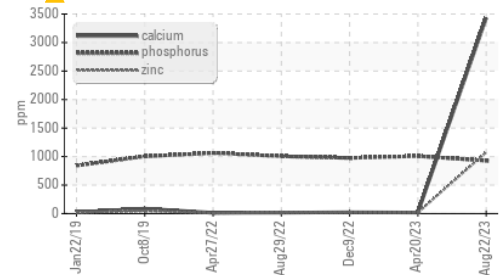
Silicon (ppm)



Viscosity @ 40°C



▲ Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0083936 **Received** : 28 Aug 2023
Lab Number : 05936843 **Diagnosed** : 29 Aug 2023
Unique Number : 10622114 **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: