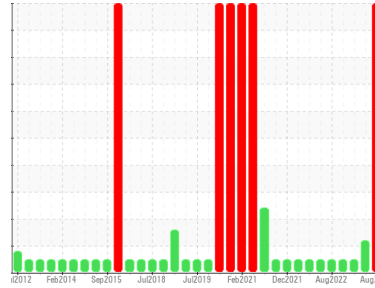


OIL ANALYSIS REPORT

Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
WL079
Component
Front Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: Hour meter 47885)

Wear

High concentration of visible metal present. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0085853	PCA0085833	PCA0037121
Sample Date	Client Info		09 Aug 2023	06 Apr 2023	19 Jan 2023
Machine Age	hrs	Client Info	47885	47308	46970
Oil Age	hrs	Client Info	900	338	1200
Oil Changed	Client Info		Not Chngd	Not Chngd	Changed
Sample Status			SEVERE	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	33	15	36
Chromium	ppm	ASTM D5185m >3	<1	0	<1
Nickel	ppm	ASTM D5185m >3	1	0	0
Titanium	ppm	ASTM D5185m >2	<1	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >30	3	<1	2
Lead	ppm	ASTM D5185m >13	47	7	4
Copper	ppm	ASTM D5185m >103	203	21	10
Tin	ppm	ASTM D5185m >5	14	<1	1
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	0	0	1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	1	1	1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	24	33	25
Calcium	ppm	ASTM D5185m	3104	3180	3010
Phosphorus	ppm	ASTM D5185m	996	995	876
Zinc	ppm	ASTM D5185m	1195	1276	1145
Sulfur	ppm	ASTM D5185m	6831	7887	8964

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	15	12	16
Sodium	ppm	ASTM D5185m	0	<1	<1
Potassium	ppm	ASTM D5185m >20	1	0	0

VISUAL

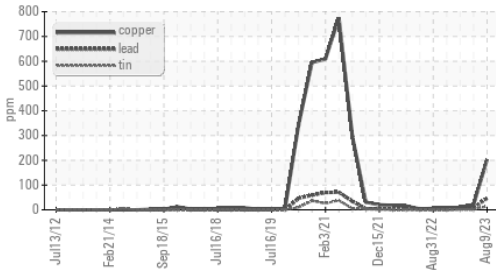
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	HEAVY	HEAVY	MODER
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >.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 195	184	183	185

OIL ANALYSIS REPORT

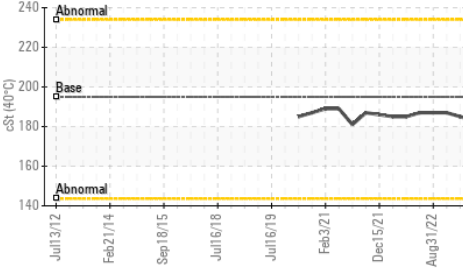
Non-ferrous Metals



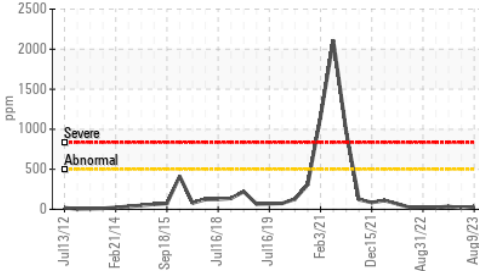
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

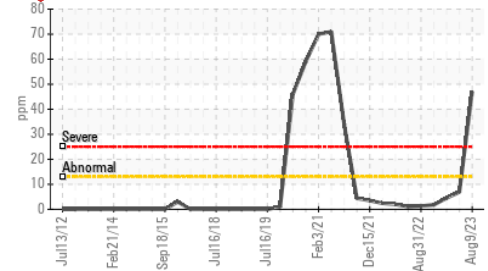
Viscosity @ 40°C



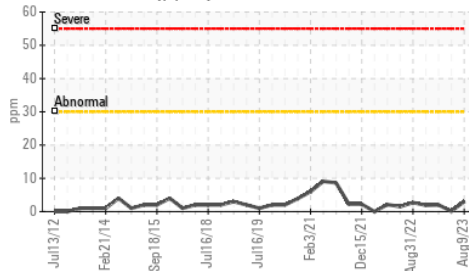
Iron (ppm)



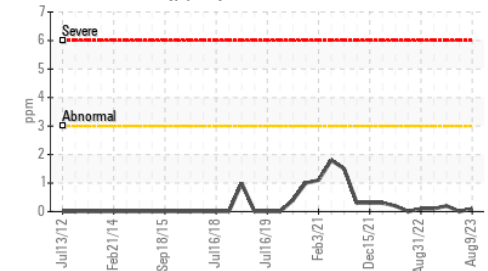
Lead (ppm)



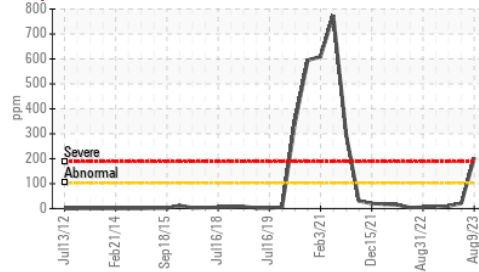
Aluminum (ppm)



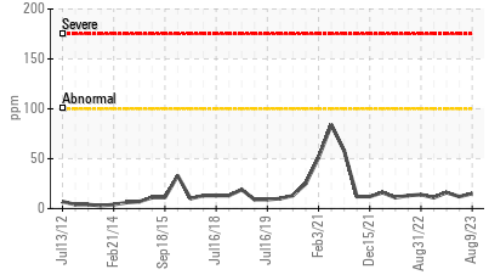
Chromium (ppm)



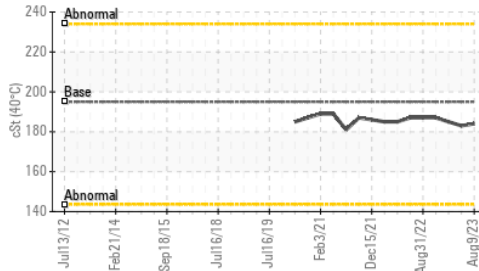
Copper (ppm)



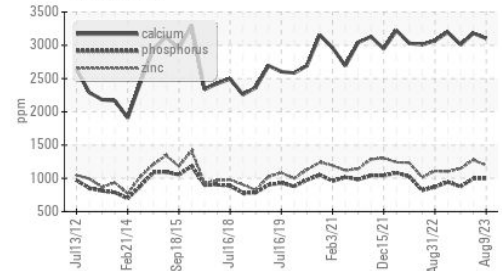
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0085853
Lab Number : 05924552
Unique Number : 10604499
Test Package : MOB 1

Kemp Quarries - River Valley - Backbone
 5600 S Hwy 253
 Huntington, AR
 US 72940

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)

backbone@rivervalleyquarries.com

T:
F: