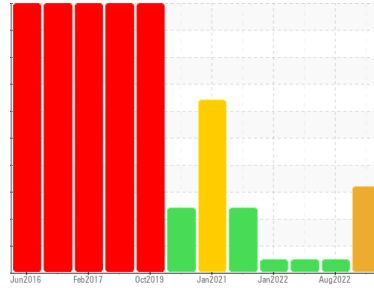


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
TTH026
Component
Front Left Final Drive
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

Wear
Gear wear is indicated. All other component wear rates are normal.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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	PCA0084785	PCA0070133	PCA0034558
Sample Date	Client Info	10 Nov 2023	01 Aug 2022	13 May 2022
Machine Age	hrs	23421	21864	20866
Oil Age	hrs	600	1006	600
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	NORMAL	NORMAL

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 >500	▲ 680	403	76
Chromium	ppm ASTM D5185m >10	5	3	<1
Nickel	ppm ASTM D5185m >10	<1	0	0
Titanium	ppm ASTM D5185m	5	2	<1
Silver	ppm ASTM D5185m	0	0	<1
Aluminum	ppm ASTM D5185m >25	▲ 14	10	5
Lead	ppm ASTM D5185m >25	<1	<1	<1
Copper	ppm ASTM D5185m >50	7	4	4
Tin	ppm ASTM D5185m >10	0	0	<1
Antimony	ppm ASTM D5185m >5	---	---	---
Vanadium	ppm ASTM D5185m	<1	<1	0
Cadmium	ppm ASTM D5185m	<1	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	3	4	9
Barium	ppm ASTM D5185m	0	<1	0
Molybdenum	ppm ASTM D5185m	2	1	1
Manganese	ppm ASTM D5185m	4	2	<1
Magnesium	ppm ASTM D5185m	28	24	26
Calcium	ppm ASTM D5185m	3164	2906	2985
Phosphorus	ppm ASTM D5185m	1138	992	923
Zinc	ppm ASTM D5185m	1327	1224	1099
Sulfur	ppm ASTM D5185m	9683	9240	8712

CONTAMINANTS

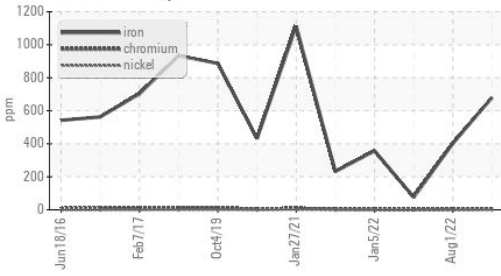
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >75	▲ 125	74	32
Sodium	ppm ASTM D5185m	0	0	<1
Potassium	ppm ASTM D5185m >20	6	3	2

VISUAL

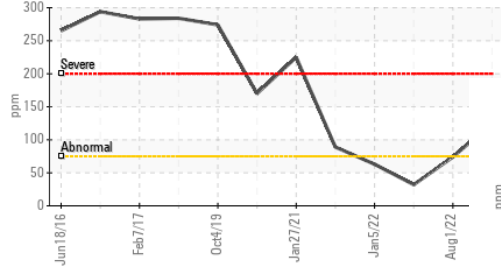
method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar *Visual NONE	NONE	NONE	NONE
Precipitate	scalar *Visual NONE	NONE	NONE	NONE
Silt	scalar *Visual NONE	MODER	NONE	NONE
Debris	scalar *Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar *Visual NONE	NONE	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

OIL ANALYSIS REPORT

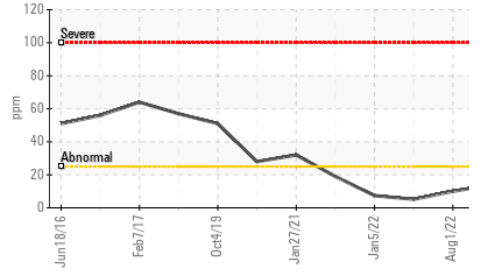
▲ Ferrous Alloys



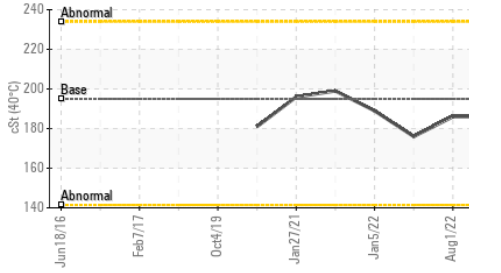
▲ Silicon (ppm)



▲ Aluminum (ppm)



Viscosity @ 40°C



FLUID PROPERTIES

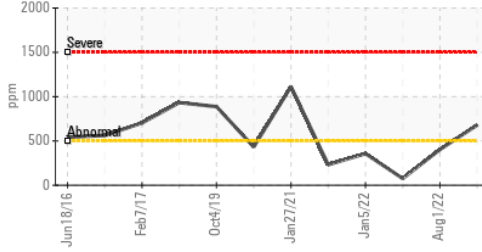
method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 195	186	186	176

SAMPLE IMAGES

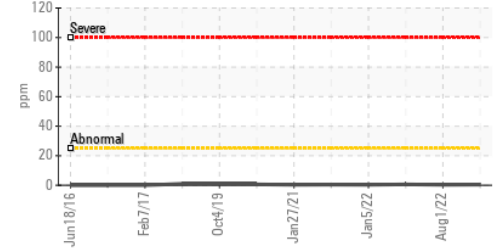
method	limit/base	current	history1	history2
Color		no image	no image	no image
Bottom		no image	no image	no image

GRAPHS

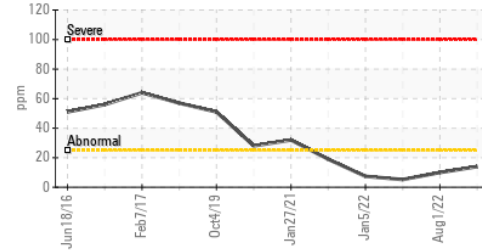
▲ Iron (ppm)



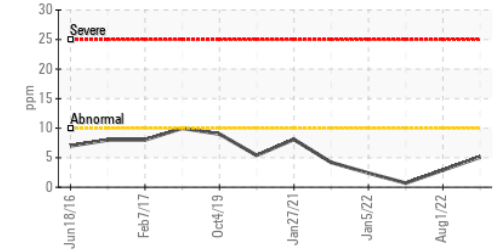
▲ Lead (ppm)



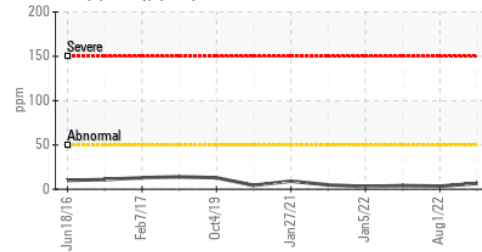
▲ Aluminum (ppm)



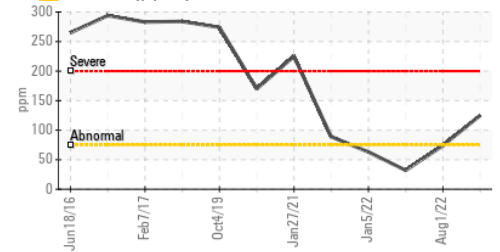
▲ Chromium (ppm)



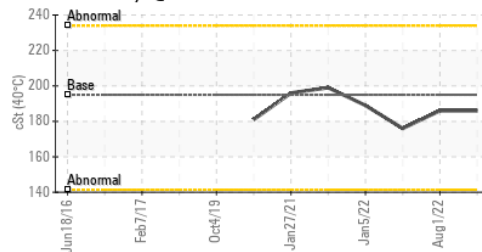
▲ Copper (ppm)



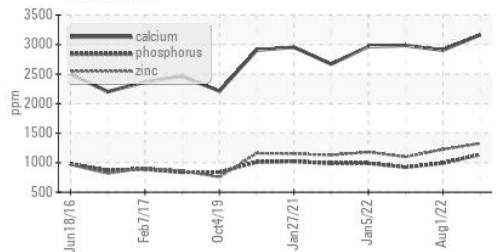
▲ Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084785 **Received** : 21 Nov 2023
Lab Number : 06014669 **Diagnosed** : 24 Nov 2023
Unique Number : 10753813 **Diagnostician** : Don Baldrige
Test Package : MOB 1

Kemp Quarries - River Valley - Backbone
 5600 S Hwy 253
 Huntington, AR
 US 72940
 Contact:
 backbone@rivervalleyquarries.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: