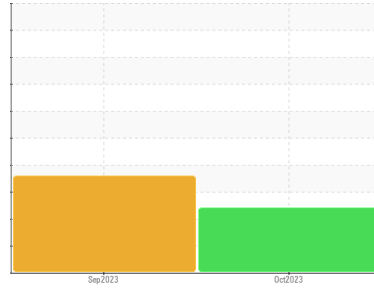


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
OHT124
Component
Hydraulic System
Fluid
NOT GIVEN (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation
No corrective action is recommended at this time. The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
Elemental level of silicon (Si) above normal indicating ingress of seal material.

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	PCA0084851	PCA0084788	---
Sample Date	Client Info	25 Oct 2023	18 Sep 2023	---
Machine Age	hrs	30229	30012	---
Oil Age	hrs	600	325	---
Oil Changed	Client Info	Not Chngd	Not Chngd	---
Sample Status		ABNORMAL	ABNORMAL	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >26	▲ 55	▲ 56	---
Chromium	ppm	ASTM D5185m >5	0	0	---
Nickel	ppm	ASTM D5185m >10	2	2	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >11	<1	3	---
Lead	ppm	ASTM D5185m >10	0	<1	---
Copper	ppm	ASTM D5185m >31	4	5	---
Tin	ppm	ASTM D5185m >10	0	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	3	4	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	<1	0	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m	8	7	---
Calcium	ppm	ASTM D5185m	412	478	---
Phosphorus	ppm	ASTM D5185m	356	461	---
Zinc	ppm	ASTM D5185m	513	555	---
Sulfur	ppm	ASTM D5185m	1340	1560	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >21	▲ 35	▲ 40	---
Sodium	ppm	ASTM D5185m	<1	0	---
Potassium	ppm	ASTM D5185m >20	0	0	---

VISUAL

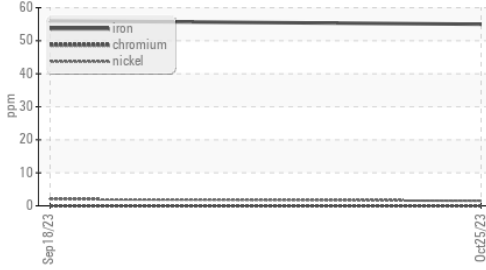
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	NONE	▲ MODER	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	NORML	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >0.1	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	69.1	69.3	---

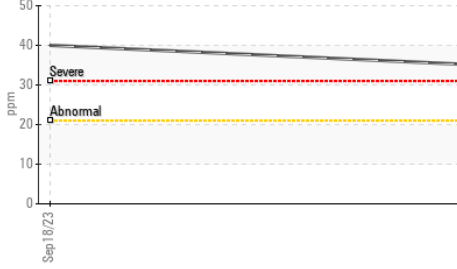
OIL ANALYSIS REPORT

▲ Ferrous Alloys



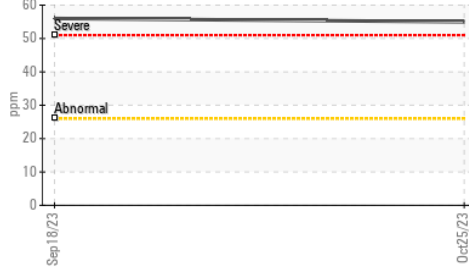
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

▲ Silicon (ppm)

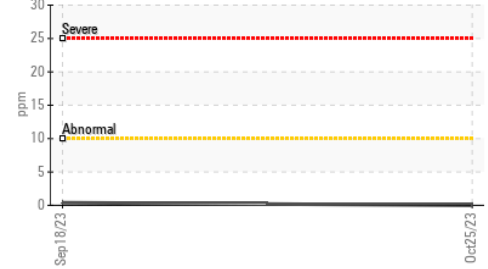


GRAPHS

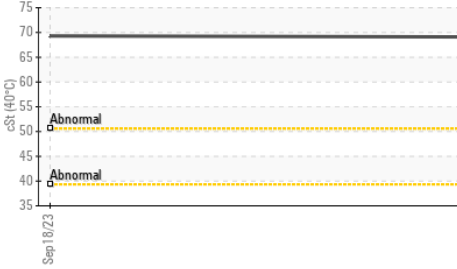
▲ Iron (ppm)



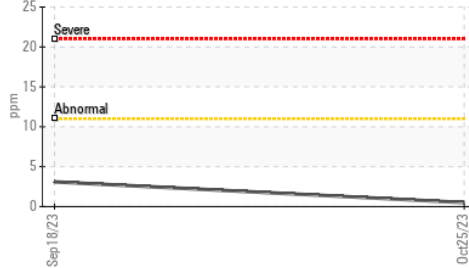
▲ Lead (ppm)



Viscosity @ 40°C



▲ Aluminum (ppm)



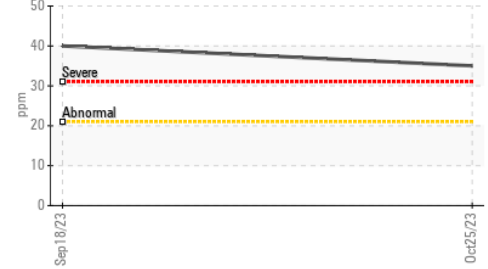
▲ Chromium (ppm)



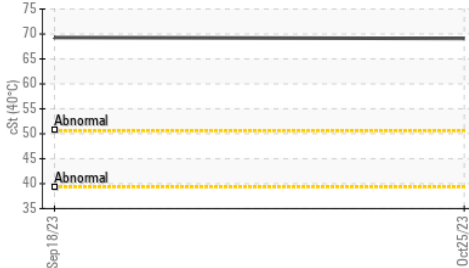
▲ Copper (ppm)



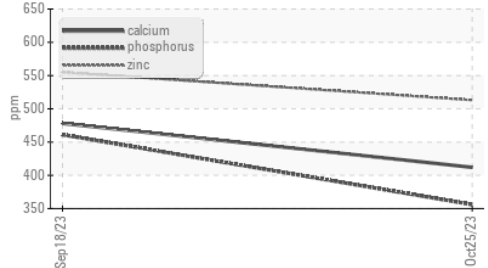
▲ Silicon (ppm)



Viscosity @ 40°C



▲ Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084851 **Received** : 06 Nov 2023
Lab Number : 06000158 **Diagnosed** : 08 Nov 2023
Unique Number : 10728518 **Diagnostician** : Jonathan Hester
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: