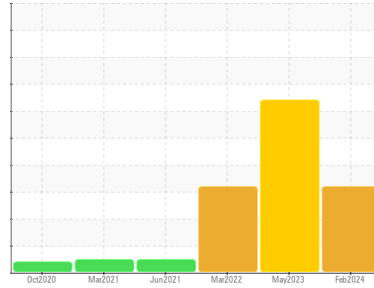


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY OZARK
Machine Id
OHT113
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (--- 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
The iron level is abnormal.

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			PCA0084434	PCA0084655	PCA0048228
Sample Date	Client Info			20 Feb 2024	01 May 2023	18 Mar 2022
Machine Age	hrs	Client Info		25814	25814	24551
Oil Age	hrs	Client Info		24551	24551	21870
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ 34	▲ 79	▲ 42
Chromium	ppm	ASTM D5185m	>10	2	<1	2
Nickel	ppm	ASTM D5185m	>10	10	0	9
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	1	0
Aluminum	ppm	ASTM D5185m	>10	● 6	● 23	● 8
Lead	ppm	ASTM D5185m	>10	<1	2	0
Copper	ppm	ASTM D5185m	>75	1	▲ 151	3
Tin	ppm	ASTM D5185m	>10	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

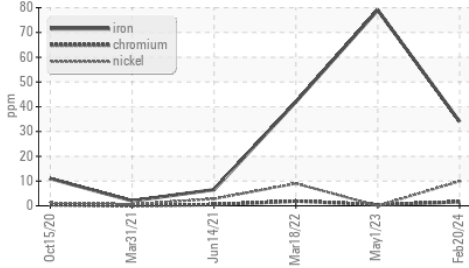
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	6	2	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	4	2	3
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	0	25	● 27	29
Calcium	ppm	ASTM D5185m	50	150	● 2889	200
Phosphorus	ppm	ASTM D5185m	330	357	● 976	393
Zinc	ppm	ASTM D5185m	430	448	● 1204	414
Sulfur	ppm	ASTM D5185m	760	731	● 5057	913

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ 32	▲ 39	▲ 33
Sodium	ppm	ASTM D5185m		2	2	0
Potassium	ppm	ASTM D5185m	>20	1	5	0

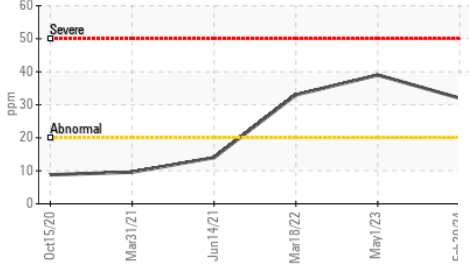
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual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

OIL ANALYSIS REPORT

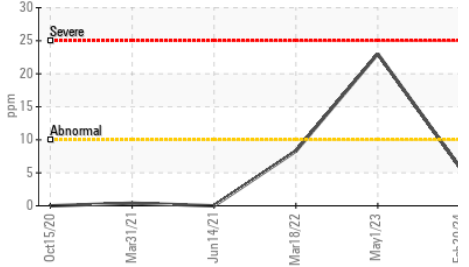
▲ Ferrous Alloys



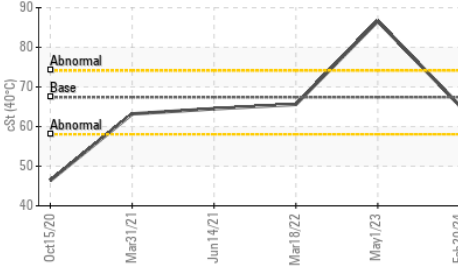
▲ Silicon (ppm)



● Aluminum (ppm)



Viscosity @ 40°C



FLUID PROPERTIES method limit/base current history1 history2

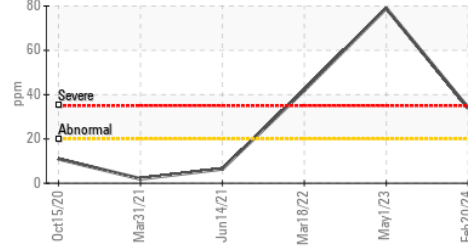
Visc @ 40°C cSt ASTM D445 67.4 **65.3** ● 86.6 65.6

SAMPLE IMAGES method limit/base current history1 history2

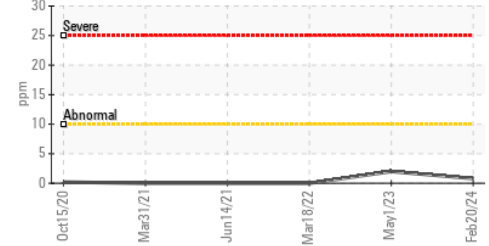
Color	no image	no image	no image
Bottom	no image	no image	no image

GRAPHS

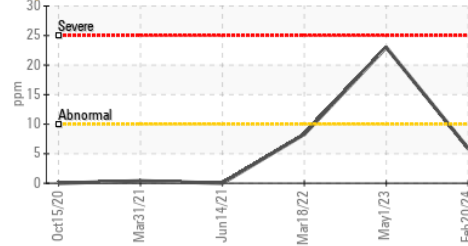
▲ Iron (ppm)



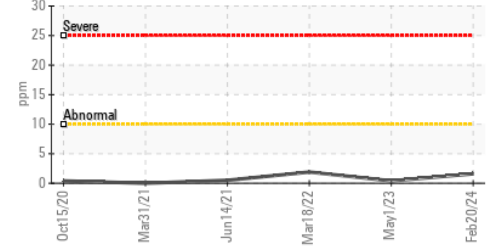
Lead (ppm)



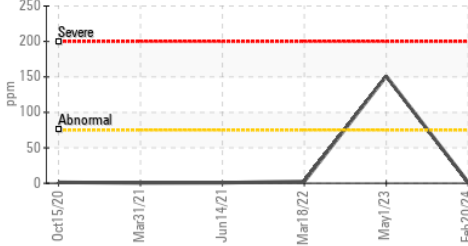
● Aluminum (ppm)



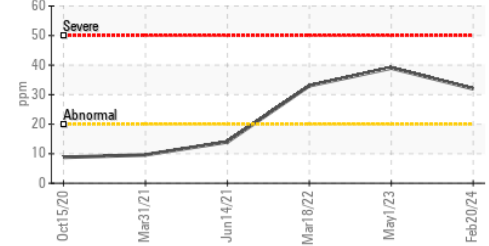
Chromium (ppm)



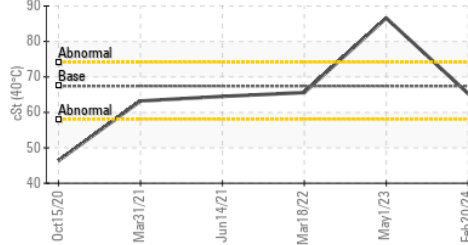
Copper (ppm)



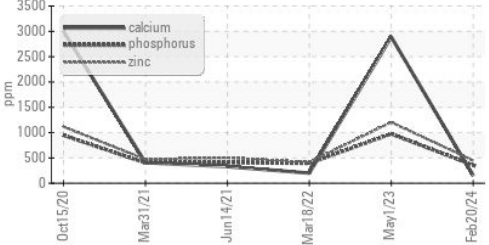
▲ Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084434 **Received** : 26 Feb 2024
Lab Number : 06100561 **Tested** : 27 Feb 2024
Unique Number : 10898791 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
Test Package : MOB 1

Kemp Quarries - River Valley - Ozark
 9446 N Hwy 309
 Ozark, AR
 US 72949
 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)

ozark@rivervalleyquarries.com

T:

F: