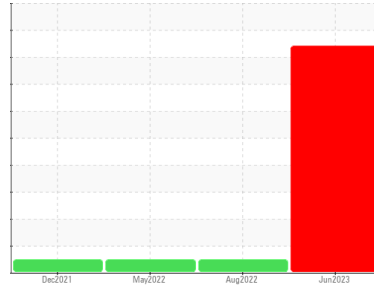


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
KEMP QUARRIES / KEMP STONE - FAIRLAND
Machine Id
OHT123
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: PM-3 changed filters)

Wear

The copper level is severe. Bearing and/or bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	PCA0086313	PCA0062459	PCA0061929
Sample Date	Client Info	21 Jun 2023	31 Aug 2022	25 May 2022
Machine Age	hrs	37279	36774	36356
Oil Age	hrs	37279	36774	36356
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		SEVERE	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >20	11	12	10
Chromium	ppm	ASTM D5185m >10	0	<1	<1
Nickel	ppm	ASTM D5185m >10	0	2	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	<1	<1
Aluminum	ppm	ASTM D5185m >10	<1	1	<1
Lead	ppm	ASTM D5185m >10	2	<1	<1
Copper	ppm	ASTM D5185m >75	357	12	12
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 0	2	2	2
Barium	ppm	ASTM D5185m 0	14	0	0
Molybdenum	ppm	ASTM D5185m 0	2	<1	<1
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	28	6	5
Calcium	ppm	ASTM D5185m 50	2806	164	72
Phosphorus	ppm	ASTM D5185m 330	1004	347	350
Zinc	ppm	ASTM D5185m 430	1170	407	430
Sulfur	ppm	ASTM D5185m 760	4594	927	852

CONTAMINANTS

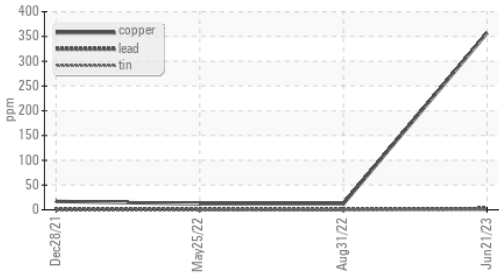
method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >20	9	2	2
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	0	0	0

VISUAL

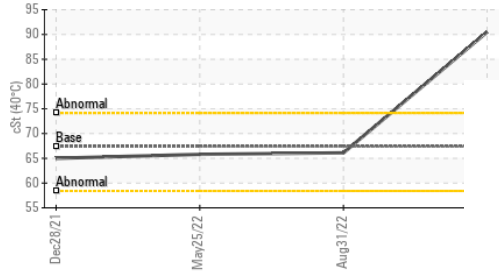
method	limit/base	current	history 1	history 2	
White Metal	scalar	*Visual NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.1	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

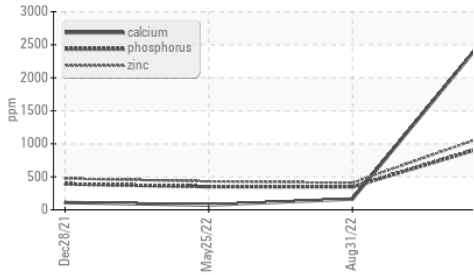
Non-ferrous Metals



Viscosity @ 40°C



Additives



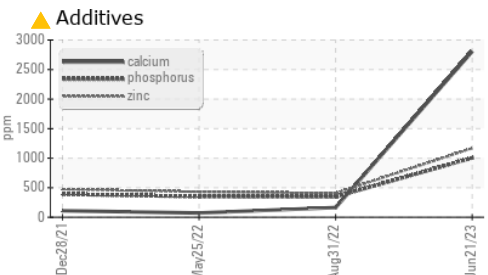
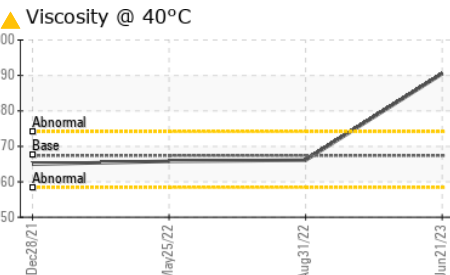
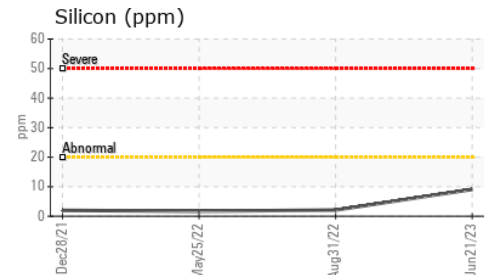
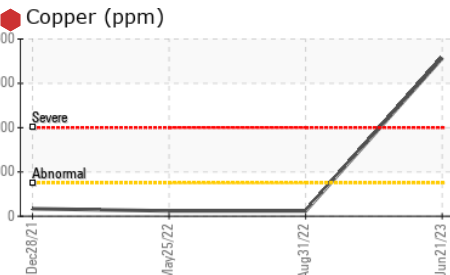
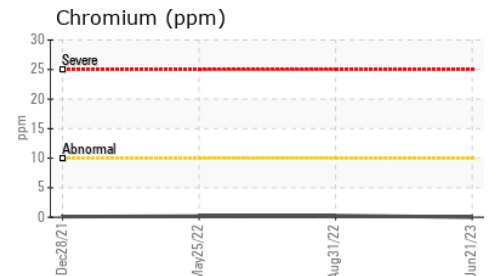
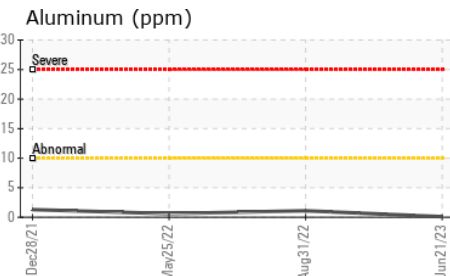
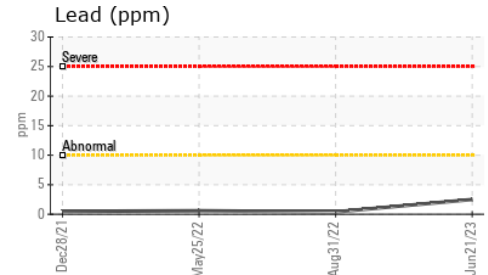
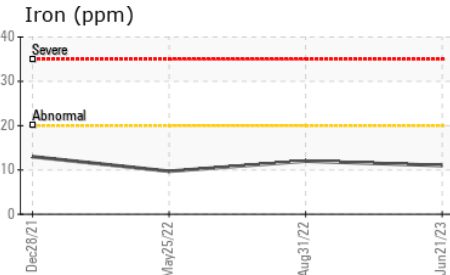
FLUID PROPERTIES method limit/base current history 1 history 2

Visc @ 40°C cSt ASTM D445 67.4 ▲ **90.5** 66.1 65.8

SAMPLE IMAGES method limit/base current history 1 history 2

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086313 **Received** : 30 Jun 2023
Lab Number : 05888585 **Diagnosed** : 05 Jul 2023
Unique Number : 10539068 **Diagnostician** : Don Baldrige
Test Package : MOB 1

Kemp Quarries - Kemp Stone - Fairland
 18350 S 590 Rd
 Fairland, OK
 US 74343
 Contact:
 fairland@kempstone.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: