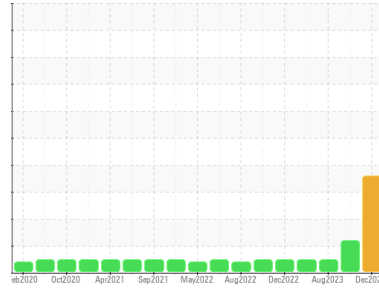


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
WL135
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (--- GAL)

Sample Rating Trend



WATER



DIAGNOSIS

▲ Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a light concentration of water present in the oil.

▲ Fluid Condition

The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0069892	PCA0084852	PCA0084833
Sample Date	Client Info		28 Dec 2023	25 Oct 2023	12 Aug 2023
Machine Age	hrs	Client Info	52934	52934	52602
Oil Age	hrs	Client Info	900	900	300
Oil Changed	Client Info		Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	11	13	15
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	0	0
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >10	2	3	3
Lead	ppm	ASTM D5185m >10	1	<1	<1
Copper	ppm	ASTM D5185m >75	3	3	4
Tin	ppm	ASTM D5185m >10	1	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	<1	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	2	<1	<1
Manganese	ppm	ASTM D5185m 0	<1	0	<1
Magnesium	ppm	ASTM D5185m 0	15	14	20
Calcium	ppm	ASTM D5185m 50	▲ 2660	▲ 1894	732
Phosphorus	ppm	ASTM D5185m 330	▲ 859	592	473
Zinc	ppm	ASTM D5185m 430	▲ 1017	828	572
Sulfur	ppm	ASTM D5185m 760	▲ 4031	▲ 2400	1688

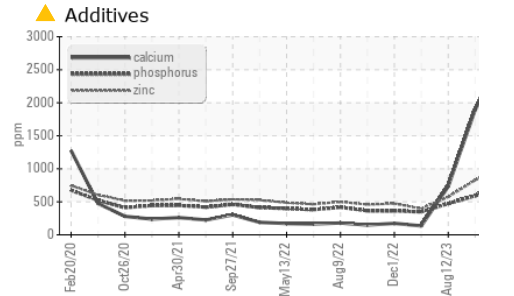
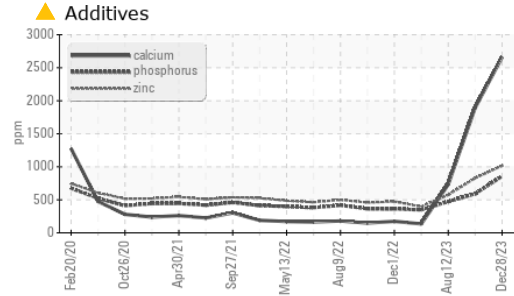
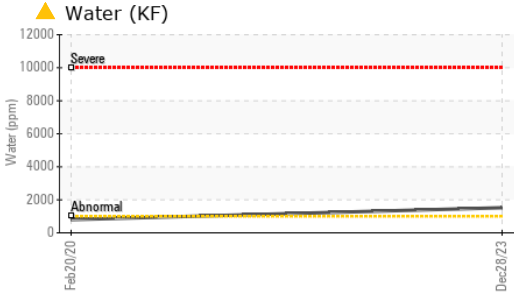
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	9	11	9
Sodium	ppm	ASTM D5185m	0	2	2
Potassium	ppm	ASTM D5185m >20	2	<1	0
Water	%	ASTM D6304 >0.1	▲ 0.152	---	---
ppm Water	ppm	ASTM D6304 >1000	▲ 1520	---	---

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	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	0.2%	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

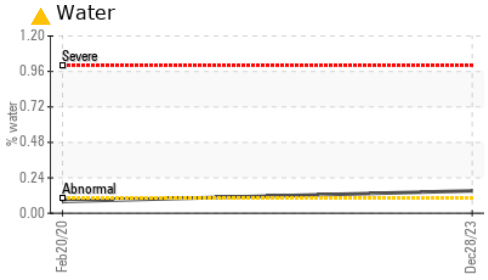
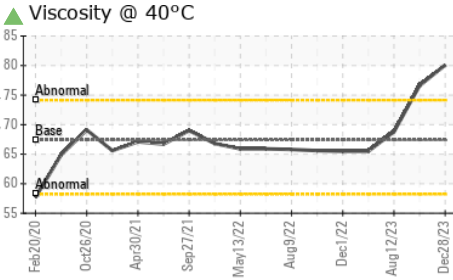
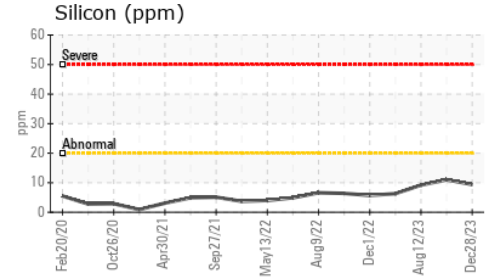
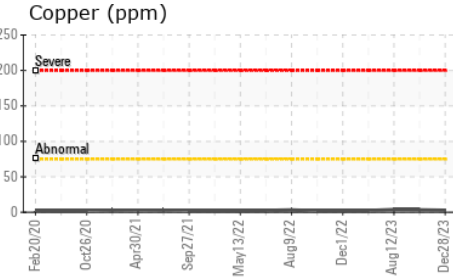
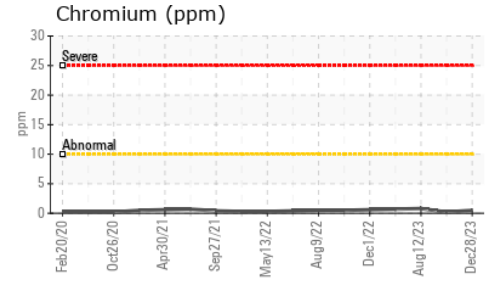
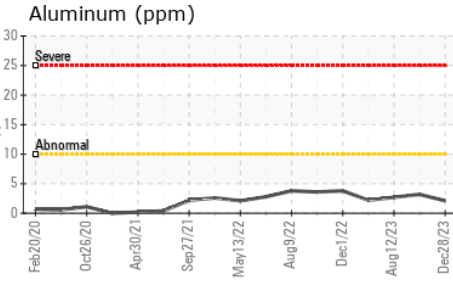
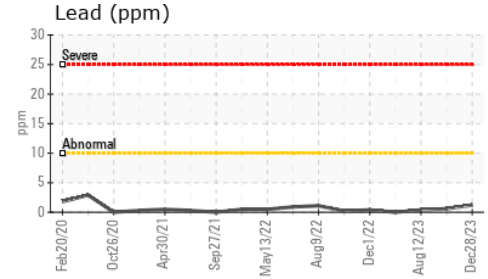
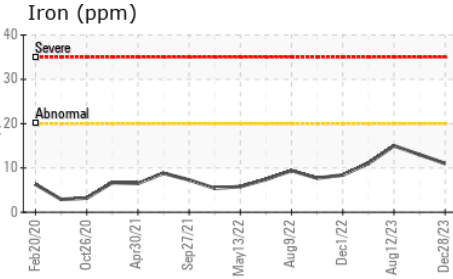
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	▲ 80.1	▲ 76.6	68.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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. : PCA0069892 **Received** : 08 Jan 2024
Lab Number : 06054446 **Diagnosed** : 10 Jan 2024
Unique Number : 10820395 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: KF)

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)