



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

**RECOMMENDATION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0069892</b>	PCA0084852	PCA0084833
Sample Date		Client Info		<b>28 Dec 2023</b>	25 Oct 2023	12 Aug 2023
Machine Age	hrs	Client Info		<b>52934</b>	52934	52602
Oil Age	hrs	Client Info		<b>900</b>	900	300
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>ABNORMAL</b>	ATTENTION	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>11</b>	13	15
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>75	<b>3</b>	3	4
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

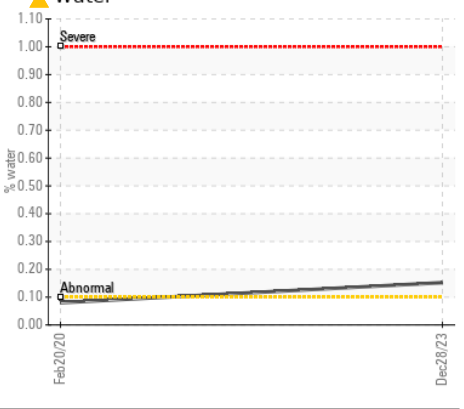
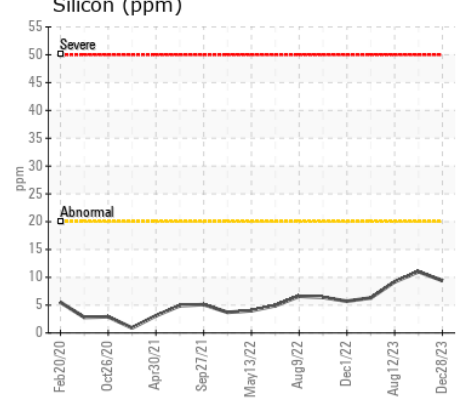
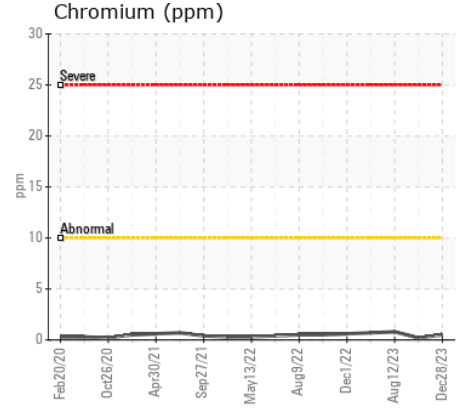
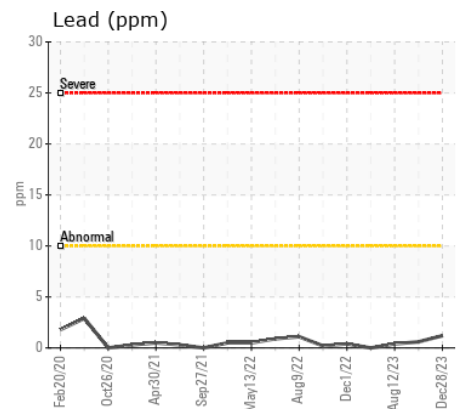
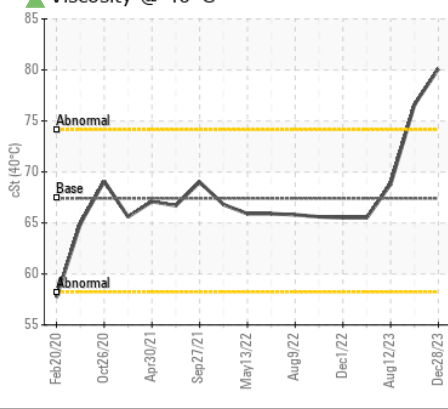
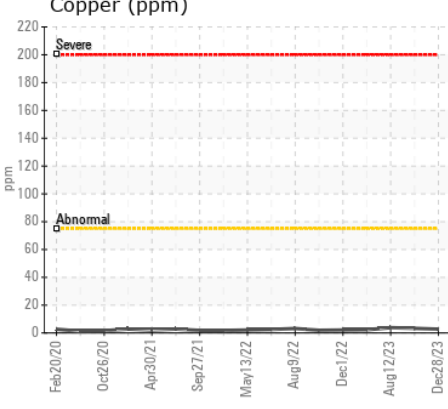
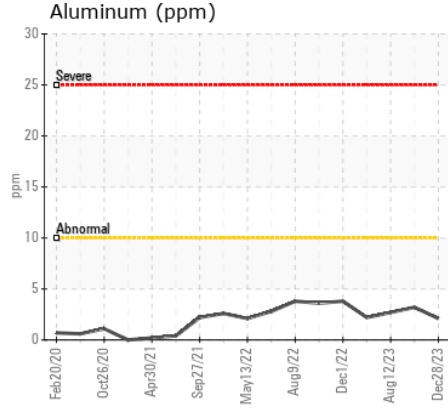
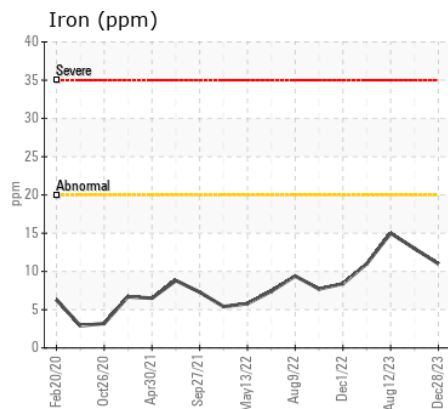
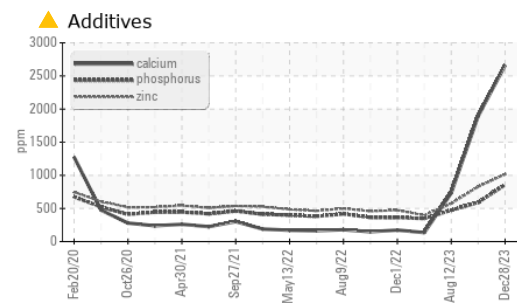
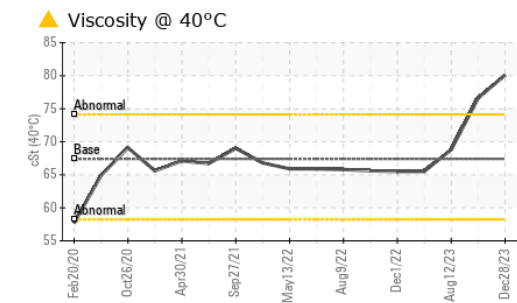
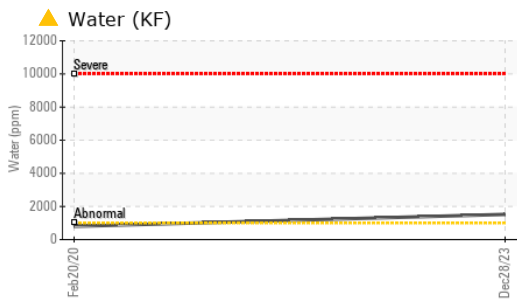
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>9</b>	11	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	0
Water	%	ASTM D6304	>0.1	<b>▲ 0.152</b>	---	---
ppm Water	ppm	ASTM D6304	>1000	<b>▲ 1520</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>0.2%</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>0</b>	2	2
Boron	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>2</b>	<1	<1
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	0	<b>15</b>	14	20
Calcium	ppm	ASTM D5185m	50	<b>▲ 2660</b>	▲ 1894	732
Phosphorus	ppm	ASTM D5185m	330	<b>▲ 859</b>	592	473
Zinc	ppm	ASTM D5185m	430	<b>▲ 1017</b>	828	572
Sulfur	ppm	ASTM D5185m	760	<b>▲ 4031</b>	▲ 2400	1688
Visc @ 40°C	cSt	ASTM D445	67.4	<b>▲ 80.1</b>	▲ 76.6	68.8



**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**  
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 T:  
 F:

Certificate L2367  
 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)