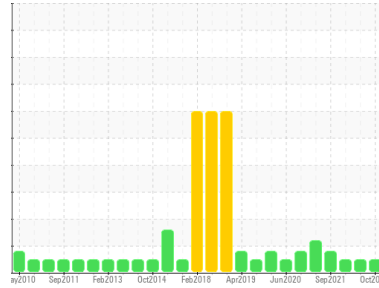


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / MUSKOGEE SAND [65225]**  
Machine Id  
**WL015**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 68 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: PM-2 changed filters )

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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		<b>PCA0087049</b>	PCA0087111	PCA0070541
Sample Date	Client Info		<b>25 Oct 2023</b>	03 Jun 2023	16 Feb 2023
Machine Age	hrs	Client Info	<b>2234</b>	1895	1210
Oil Age	hrs	Client Info	<b>2234</b>	685	2000
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>4</b>	10	11
Chromium	ppm	ASTM D5185m >10	<b>4</b>	14	12
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >75	<b>10</b>	28	8
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	3
Barium	ppm	ASTM D5185m 0	<b>19</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>2</b>	1	2
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>26</b>	16	25
Calcium	ppm	ASTM D5185m 50	<b>87</b>	106	130
Phosphorus	ppm	ASTM D5185m 330	<b>371</b>	340	360
Zinc	ppm	ASTM D5185m 430	<b>456</b>	445	446
Sulfur	ppm	ASTM D5185m 760	<b>1168</b>	942	1079

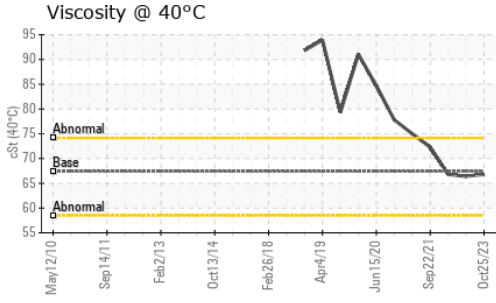
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>2</b>	3	4
Sodium	ppm	ASTM D5185m	<b>2</b>	0	2
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	LIGHT	LIGHT
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>NEG</b>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

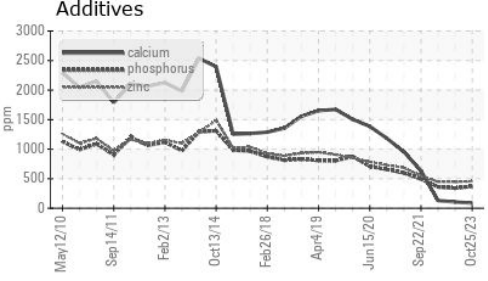
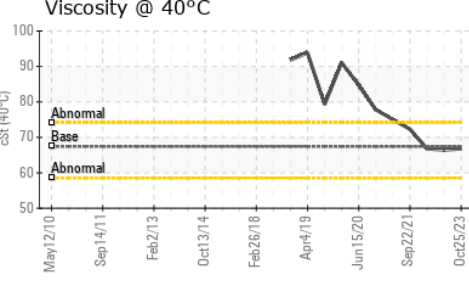
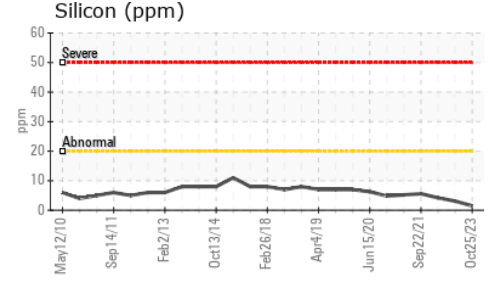
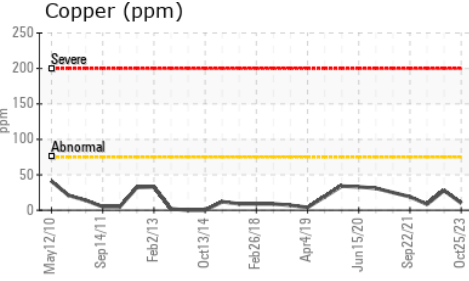
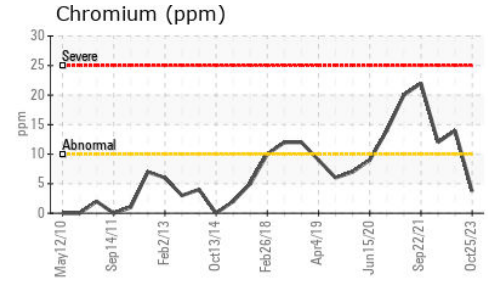
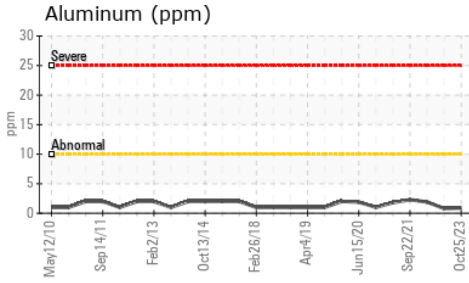
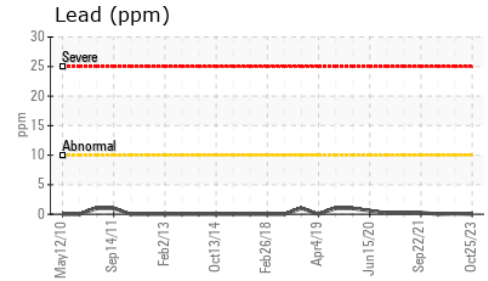
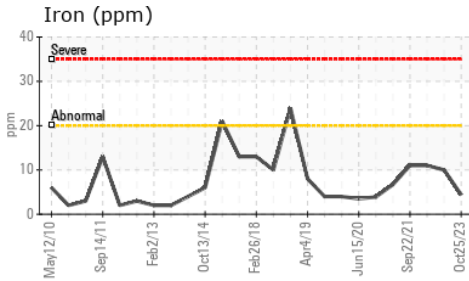


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	<b>66.8</b>	66.4	66.8

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.** : PCA0087049 **Received** : 30 Oct 2023  
**Lab Number** : **05993908** **Diagnosed** : 01 Nov 2023  
**Unique Number** : 10722268 **Diagnostician** : Sean Felton  
**Test Package** : MOB 1

**Kemp Quarries - Muskogee Sand**  
 3395 W 50th St N  
 Porter, OK  
 US 74454  
 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)

muskogee@muskogeessand.com

T:  
F: