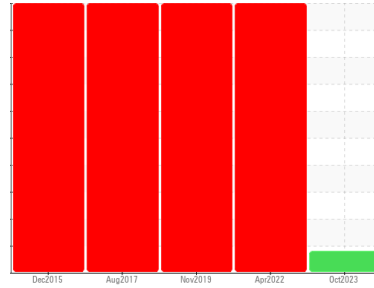


# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**KEMP QUARRIES / KEMP STONE - FAIRLAND [62857]**  
 Machine Id  
**CRN014**  
 Component  
**Front Right Final Drive**  
 Fluid  
**PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: PM-1 sampled fluid )

### Wear

The copper level is abnormal. All other 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>PCA0087024</b>	PCA0034287	PCA36409028
Sample Date	Client Info	<b>31 Oct 2023</b>	13 Apr 2022	18 Nov 2019
Machine Age	hrs	Client Info	1150	324
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>ABNORMAL</b>	SEVERE	SEVERE

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >500	<b>61</b>	224	198
Chromium	ppm	ASTM D5185m >10	<b>0</b>	5	4
Nickel	ppm	ASTM D5185m >10	<b>0</b>	<1	2
Titanium	ppm	ASTM D5185m	<b>0</b>	3	0
Silver	ppm	ASTM D5185m	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >25	<b>9</b>	▲ 47	52
Lead	ppm	ASTM D5185m >25	<b>7</b>	▲ 50	35
Copper	ppm	ASTM D5185m >50	▲ <b>68</b>	● 573	● 369
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	8	11
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	<b>212</b>	70	46
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	2	2
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	4	0
Magnesium	ppm	ASTM D5185m 9	<b>3</b>	31	26
Calcium	ppm	ASTM D5185m 3114	<b>177</b>	1560	1227
Phosphorus	ppm	ASTM D5185m 1099	<b>972</b>	985	786
Zinc	ppm	ASTM D5185m 1245	<b>89</b>	588	448
Sulfur	ppm	ASTM D5185m 7086	<b>20041</b>	14726	---

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >75	<b>56</b>	● 237	● 284
Sodium	ppm	ASTM D5185m	<b>2</b>	11	10
Potassium	ppm	ASTM D5185m >20	<b>3</b>	13	19

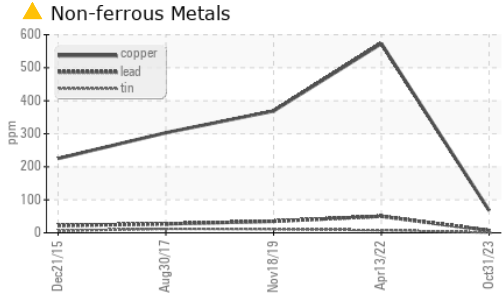
## VISUAL

method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual NONE	<b>NONE</b>	LIGHT	---
Debris	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual >0.2	<b>NEG</b>	NEG	---
Free Water	scalar	*Visual	<b>NEG</b>	NEG	---

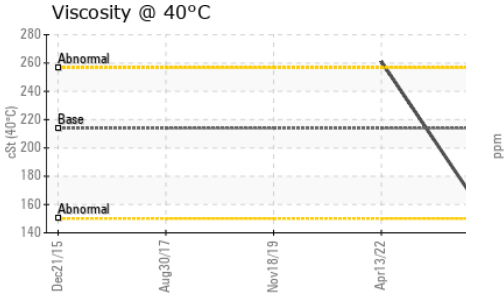
## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 213.9	<b>148</b>	261	---

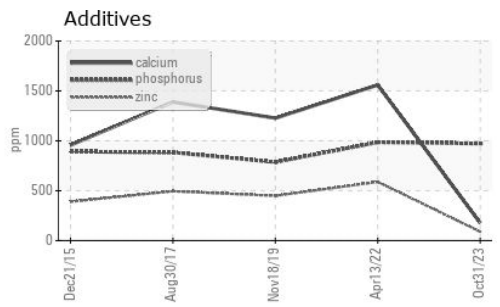
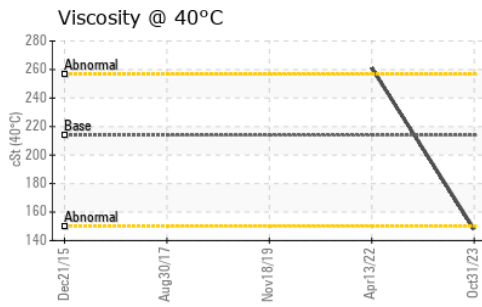
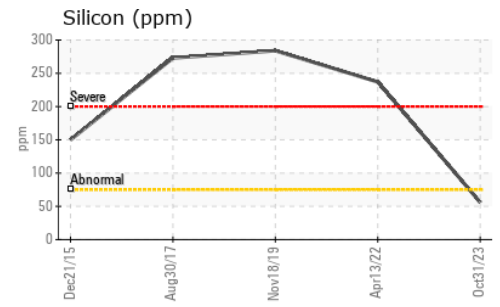
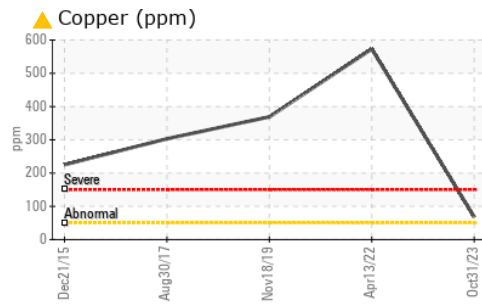
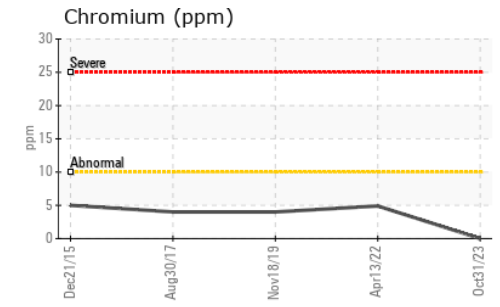
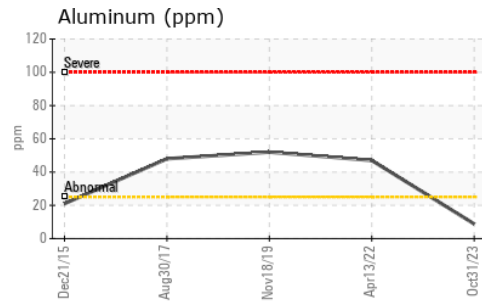
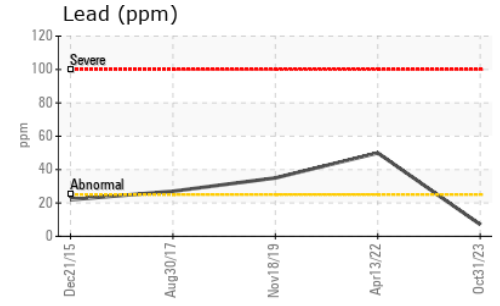
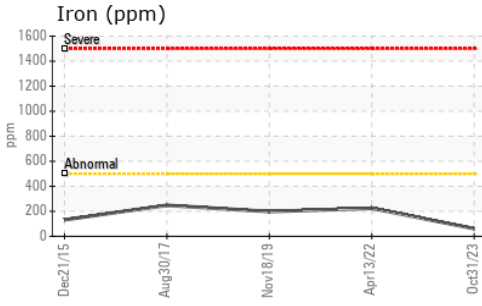
# OIL ANALYSIS REPORT



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0087024 **Received** : 13 Nov 2023  
**Lab Number** : 06006599 **Diagnosed** : 15 Nov 2023  
**Unique Number** : 10740361 **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: