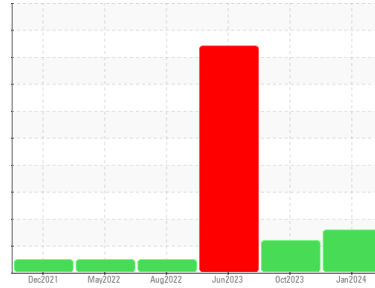


# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Area  
**KEMP QUARRIES / KEMP STONE - FAIRLAND [67744]**  
 Machine Id  
**OHT123**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX AW 68 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: PM-1 sampled fluid)

#### Wear

All component wear rates are normal.

#### 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	history1	history2
Sample Number	Client Info		<b>PCA0070630</b>	PCA0084734	PCA0086313
Sample Date	Client Info		<b>02 Jan 2024</b>	02 Oct 2023	21 Jun 2023
Machine Age	hrs	Client Info	<b>37987</b>	37517	37279
Oil Age	hrs	Client Info	<b>37987</b>	37517	37279
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>ATTENTION</b>	ATTENTION	SEVERE

### CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>7</b>	12	11
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	3	0
Nickel	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>1</b>	2	<1
Lead	ppm	ASTM D5185m >10	<b>1</b>	0	2
Copper	ppm	ASTM D5185m >75	<b>3</b>	8	357
Tin	ppm	ASTM D5185m >10	<b>1</b>	0	0
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>1</b>	<1	2
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	14
Molybdenum	ppm	ASTM D5185m 0	<b>1</b>	2	2
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 0	<b>▲ 32</b>	14	▲ 28
Calcium	ppm	ASTM D5185m 50	<b>▲ 1844</b>	▲ 1736	▲ 2806
Phosphorus	ppm	ASTM D5185m 330	<b>752</b>	557	▲ 1004
Zinc	ppm	ASTM D5185m 430	<b>871</b>	825	▲ 1170
Sulfur	ppm	ASTM D5185m 760	<b>▲ 2603</b>	▲ 2430	▲ 4594

### CONTAMINANTS

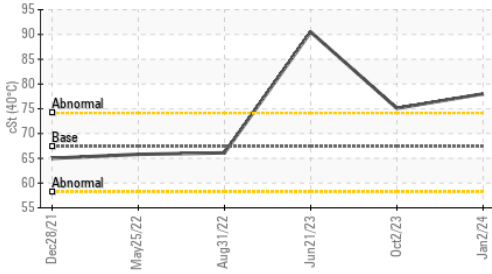
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>4</b>	12	9
Sodium	ppm	ASTM D5185m	<b>2</b>	0	<1
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	1	0

### VISUAL

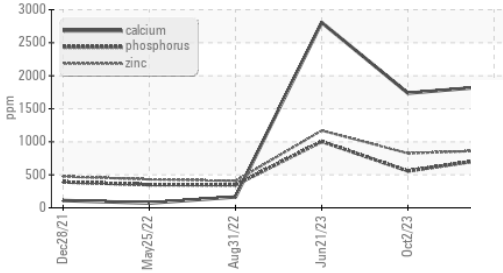
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE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

# OIL ANALYSIS REPORT

▲ Viscosity @ 40°C



▲ Additives



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	▲ 78.0	▲ 75.1	▲ 90.5

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

Color

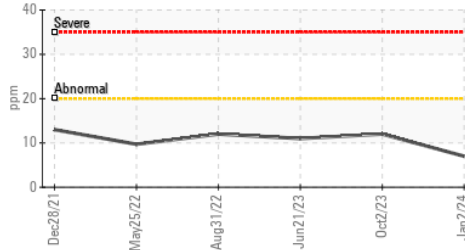
no image	no image	no image
----------	----------	----------

Bottom

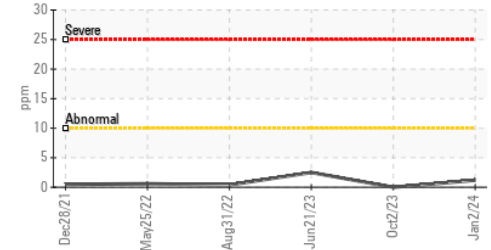
no image	no image	no image
----------	----------	----------

## GRAPHS

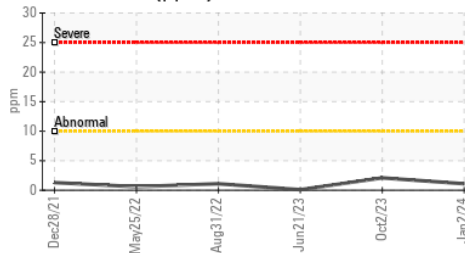
Iron (ppm)



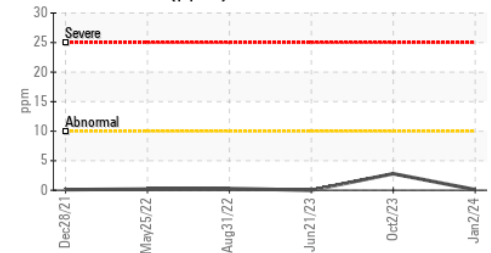
Lead (ppm)



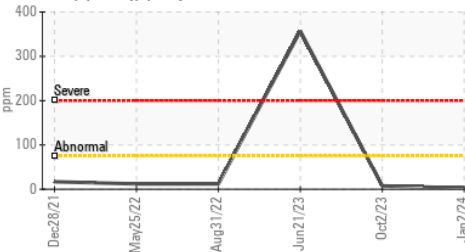
Aluminum (ppm)



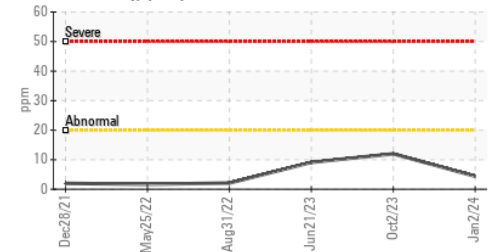
Chromium (ppm)



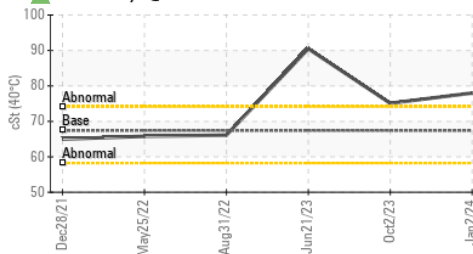
Copper (ppm)



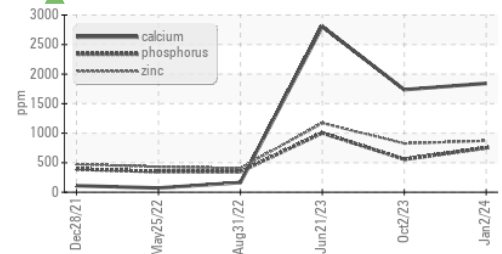
Silicon (ppm)



▲ Viscosity @ 40°C



▲ Additives



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0070630 **Received** : 10 Jan 2024  
**Lab Number** : 06057546 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10823495 **Diagnostician** : Don Baldrige  
**Test Package** : MOB 1

**Kemp Quarries - Kemp Stone - Fairland**  
 18350 S 590 Rd  
 Fairland, OK  
 US 74343  
 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)

fairland@kempstone.com

T:

F: