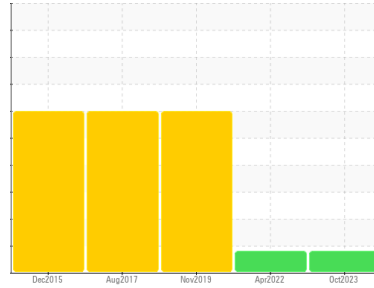


Area
KEMP QUARRIES / KEMP STONE - FAIRLAND [62857]
Machine Id
CRN014
Component
Transmission
Fluid
PETRO CANADA PRODURO TO-4 SAE 30 (--- GAL)



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 lead level has decreased, but is still abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	PCA0087052	PCA0034283	PCA36409027	
Sample Date	Client Info	31 Oct 2023	13 Apr 2022	18 Nov 2019	
Machine Age	hrs	Client Info	1374	1150	324
Oil Age	hrs	Client Info	1374	0	0
Oil Changed	Client Info	N/A	Changed	N/A	
Sample Status		ABNORMAL	ABNORMAL	SEVERE	

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >200	6	25	32
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m	0	1	1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	<1	0
Aluminum	ppm	ASTM D5185m >50	<1	4	4
Lead	ppm	ASTM D5185m >50	▲ 93	▲ 120	199
Copper	ppm	ASTM D5185m >200	71	94	● 120
Tin	ppm	ASTM D5185m >10	0	<1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	5	12	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 2	52	41	43
Barium	ppm	ASTM D5185m 0	0	0	2
Molybdenum	ppm	ASTM D5185m 0	0	<1	1
Manganese	ppm	ASTM D5185m 9	<1	2	0
Magnesium	ppm	ASTM D5185m 1	10	11	15
Calcium	ppm	ASTM D5185m 3131	1313	212	265
Phosphorus	ppm	ASTM D5185m 1194	599	276	344
Zinc	ppm	ASTM D5185m 1281	531	114	153
Sulfur	ppm	ASTM D5185m 3811	2441	1386	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	3	4	10
Sodium	ppm	ASTM D5185m	2	3	4
Potassium	ppm	ASTM D5185m >20	0	0	0

VISUAL

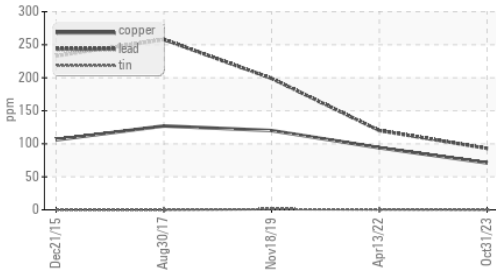
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	NORML	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >0.1	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 88.5	43.6	26.1	---

OIL ANALYSIS REPORT

▲ Non-ferrous Metals

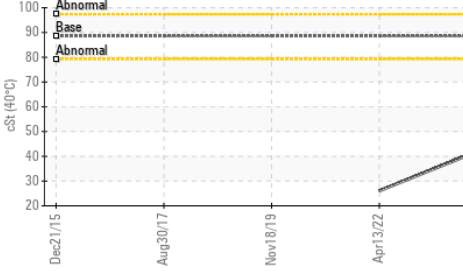


SAMPLE IMAGES method limit/base current history1 history2

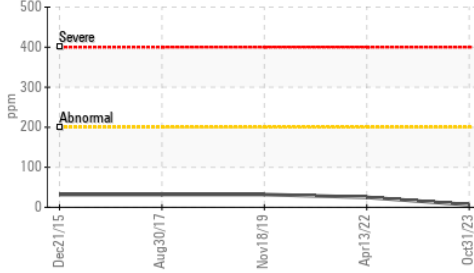
Color	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS

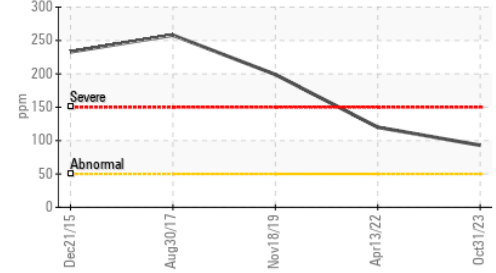
Viscosity @ 40°C



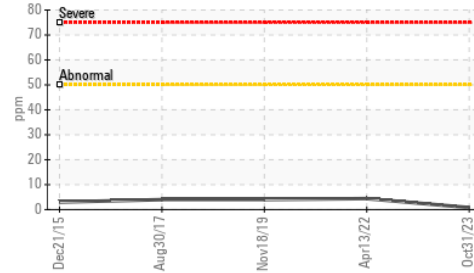
Iron (ppm)



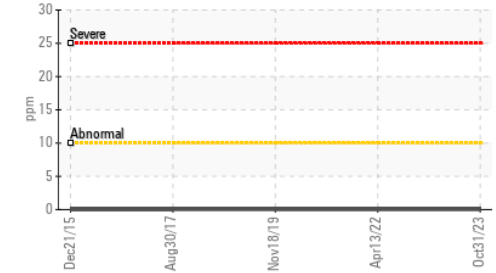
▲ Lead (ppm)



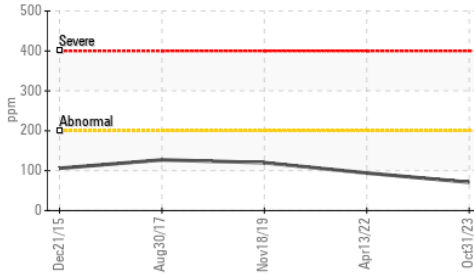
Aluminum (ppm)



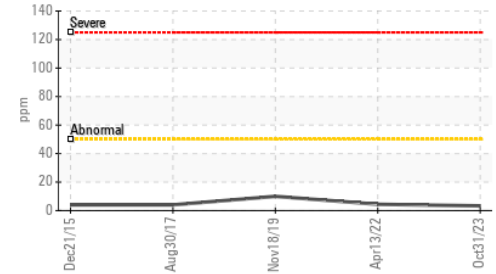
Chromium (ppm)



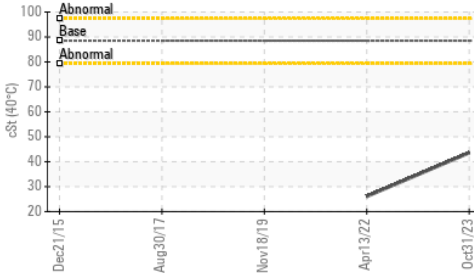
Copper (ppm)



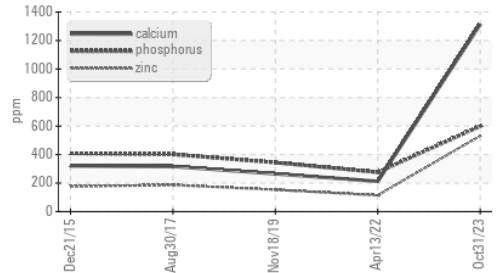
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0087052 **Received** : 13 Nov 2023
Lab Number : 06006615 **Diagnosed** : 15 Nov 2023
Unique Number : 10740377 **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: