



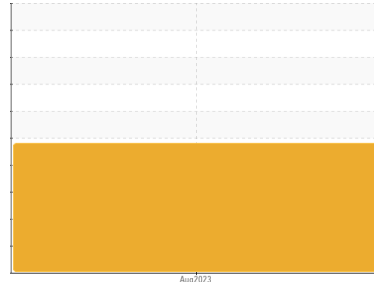
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Area
KEMP QUARRIES / PRYOR STONE
 Machine Id
WL095
 Component
Right Final Drive
 Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid)

Wear

Gear wear is indicated. All other metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower 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		PCA0086413	---	---
Sample Date	Client Info		02 Aug 2023	---	---
Machine Age	hrs	Client Info	2544	---	---
Oil Age	hrs	Client Info	2544	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 1656	---	---
Chromium	ppm	ASTM D5185m >10	▲ 31	---	---
Nickel	ppm	ASTM D5185m >5	2	---	---
Titanium	ppm	ASTM D5185m >15	1	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >75	18	---	---
Lead	ppm	ASTM D5185m >10	0	---	---
Copper	ppm	ASTM D5185m >75	30	---	---
Tin	ppm	ASTM D5185m >8	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	▲ 382	---	---
Barium	ppm	ASTM D5185m 0	5	---	---
Molybdenum	ppm	ASTM D5185m 0	0	---	---
Manganese	ppm	ASTM D5185m 0	▲ 21	---	---
Magnesium	ppm	ASTM D5185m 9	▲ 861	---	---
Calcium	ppm	ASTM D5185m 3114	▲ 82	---	---
Phosphorus	ppm	ASTM D5185m 1099	▲ 1528	---	---
Zinc	ppm	ASTM D5185m 1245	▲ 85	---	---
Sulfur	ppm	ASTM D5185m 7086	▲ 25163	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	86	---	---
Sodium	ppm	ASTM D5185m	16	---	---
Potassium	ppm	ASTM D5185m >20	7	---	---

VISUAL

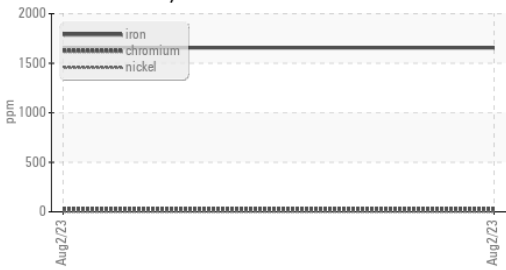
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---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

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 213.9	▲ 55.9	---	---

OIL ANALYSIS REPORT

▲ Ferrous Alloys



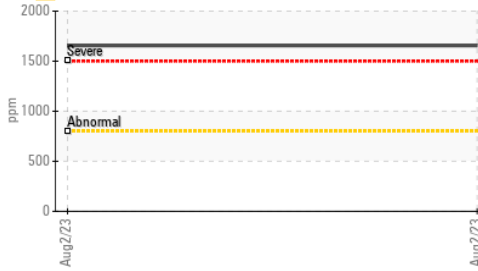
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image

▲ Viscosity @ 40°C

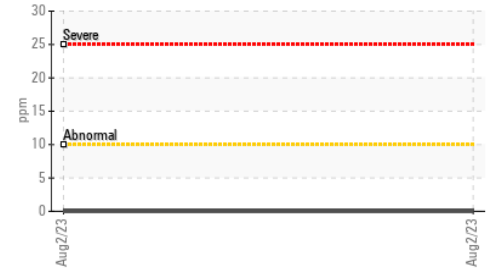


GRAPHS

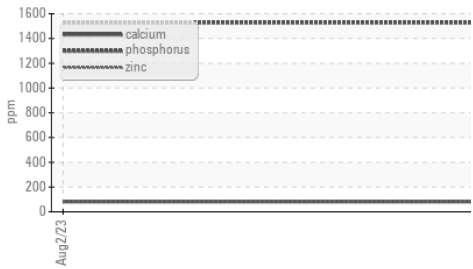
▲ Iron (ppm)



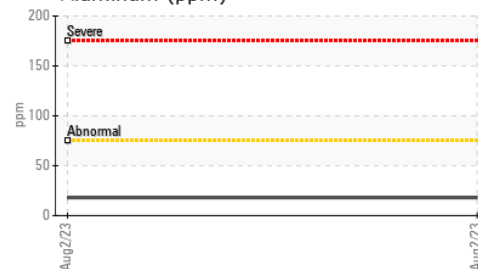
▲ Lead (ppm)



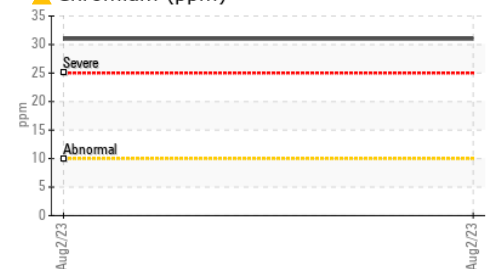
▲ Additives



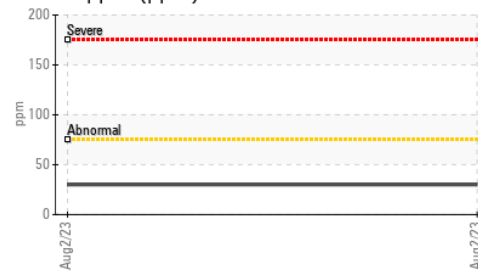
▲ Aluminum (ppm)



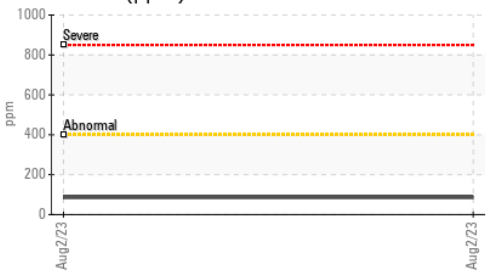
▲ Chromium (ppm)



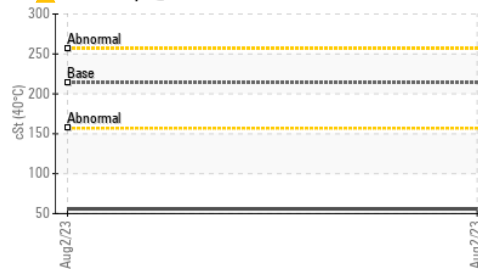
▲ Copper (ppm)



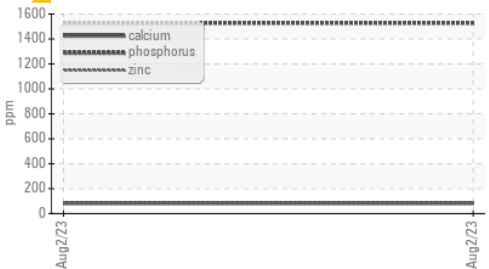
▲ Silicon (ppm)



▲ Viscosity @ 40°C



▲ Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086413 **Received** : 16 Aug 2023
Lab Number : 05926891 **Diagnosed** : 18 Aug 2023
Unique Number : 10606838 **Diagnostician** : Don Baldrige
Test Package : MOB 1

Kemp Quarries - Pryor Stone - Pryor
 1050 E 520 Rd
 Pryor, OK
 US 74361
 Contact:
 pryor@pryorstone.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: