

OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Area
KEMP QUARRIES / MUSKOGEE SAND
 Machine Id
WL074
 Component
Left Final Drive
 Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)


DIAGNOSIS
Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid, might be combined with right)

Wear

The iron level is abnormal. All other metal levels are typical for a new component breaking in.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

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		PCA0084510	---	---
Sample Date	Client Info		01 Aug 2023	---	---
Machine Age	hrs	Client Info	407	---	---
Oil Age	hrs	Client Info	407	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 996	---	---
Chromium	ppm	ASTM D5185m >10	11	---	---
Nickel	ppm	ASTM D5185m >10	7	---	---
Titanium	ppm	ASTM D5185m	3	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	14	---	---
Lead	ppm	ASTM D5185m >25	0	---	---
Copper	ppm	ASTM D5185m >50	6	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

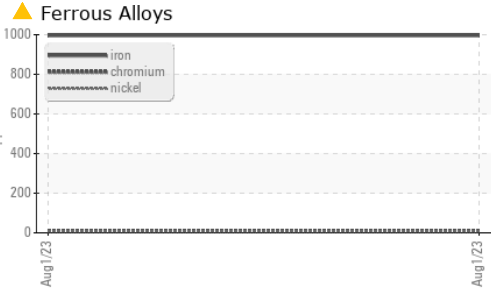
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	75	---	---
Barium	ppm	ASTM D5185m 0	34	---	---
Molybdenum	ppm	ASTM D5185m 0	12	---	---
Manganese	ppm	ASTM D5185m 0	20	---	---
Magnesium	ppm	ASTM D5185m 9	189	---	---
Calcium	ppm	ASTM D5185m 3114	2017	---	---
Phosphorus	ppm	ASTM D5185m 1099	1043	---	---
Zinc	ppm	ASTM D5185m 1245	947	---	---
Sulfur	ppm	ASTM D5185m 7086	14587	---	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	▲ 204	---	---
Sodium	ppm	ASTM D5185m	15	---	---
Potassium	ppm	ASTM D5185m >20	9	---	---

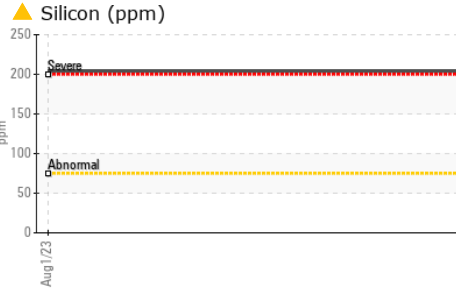
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---
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	148	---	---

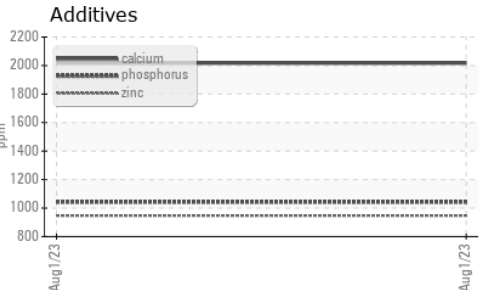
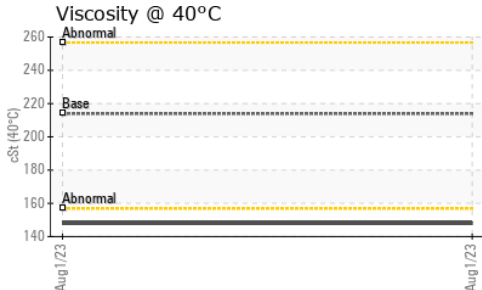
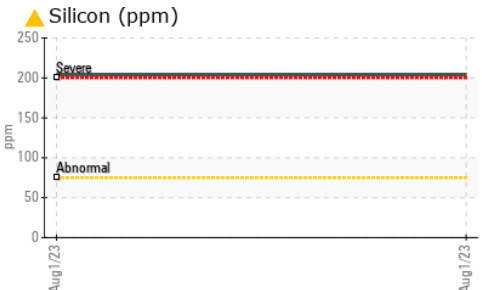
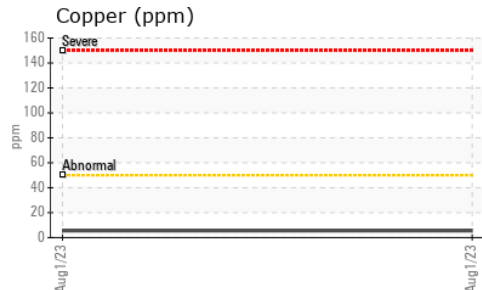
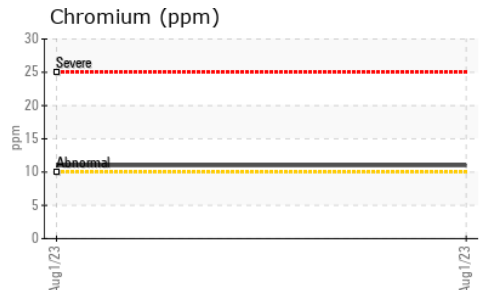
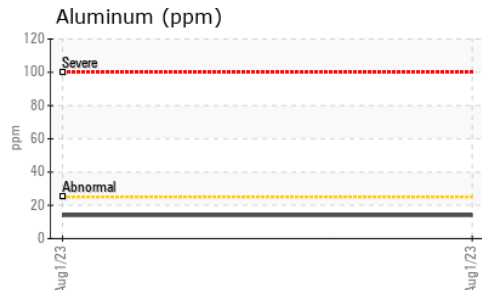
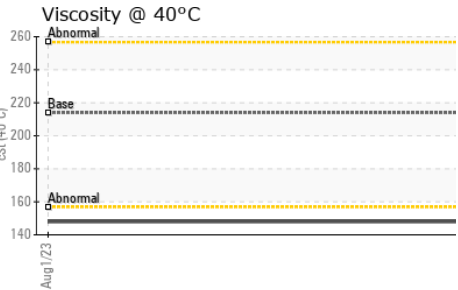
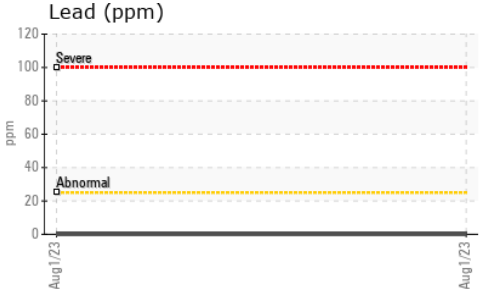
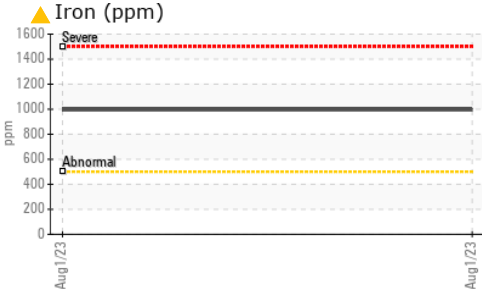
OIL ANALYSIS REPORT



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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084510 **Received** : 16 Aug 2023
Lab Number : 05926898 **Diagnosed** : 18 Aug 2023
Unique Number : 10606845 **Diagnostician** : Don Baldrige
Test Package : MOB 1

Kemp Quarries - Muskogee Sand
 3395 W 50th St N
 Porter, OK
 US 74454
 Contact:
 muskogee@muskogeessand.com
 T:
 F:

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)