



Area
[66779]
Machine Id
OHT045
Component
Rear Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: PM-3 sampled fluid)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0126272	PCA0062023	PCA0037524
Sample Date		Client Info		25 Jun 2024	18 Jan 2023	14 Apr 2022
Machine Age	hrs	Client Info		3951	3426	2905
Oil Age	hrs	Client Info		3951	10014	2905
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>500	31	69	31
Chromium	ppm	ASTM D5185m	>3	2	<1	<1
Nickel	ppm	ASTM D5185m	>3	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>30	3	3	3
Lead	ppm	ASTM D5185m	>13	6	▲ 8	2
Copper	ppm	ASTM D5185m	>103	▲ 134	▲ 72	5
Tin	ppm	ASTM D5185m	>5	2	2	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

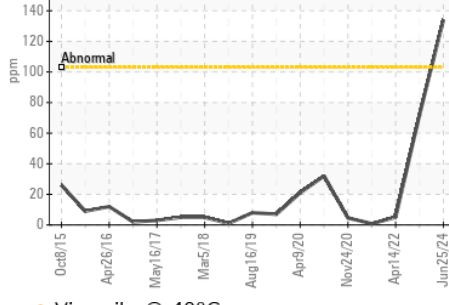
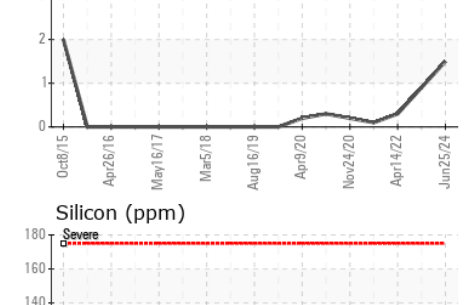
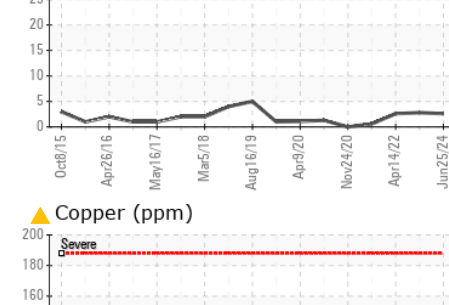
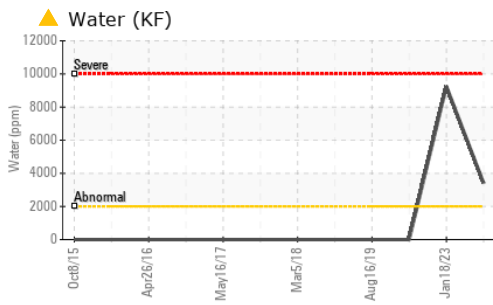
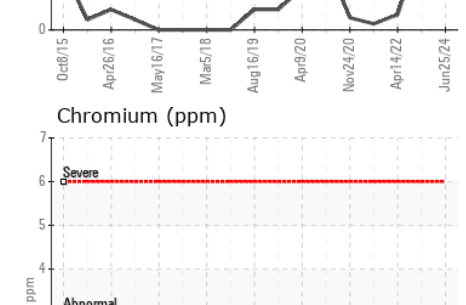
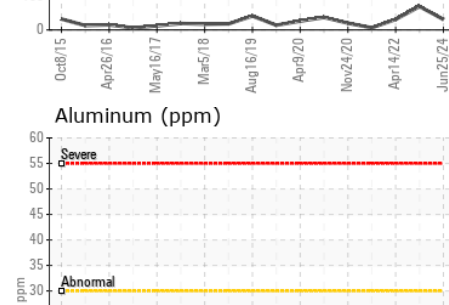
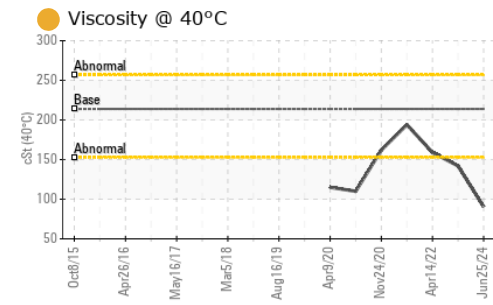
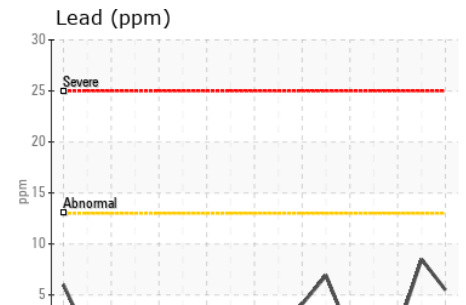
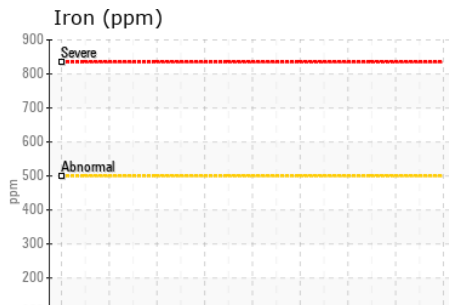
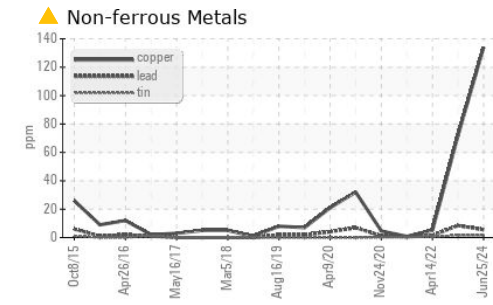
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>100	13	34	23
Potassium	ppm	ASTM D5185m	>20	2	4	0
Water	%	ASTM D6304	>.2	▲ 0.341	▲ 0.925	---
ppm Water	ppm	ASTM D6304	>2000	▲ 3410	▲ 9250	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	0.2%	0.2%	NEG

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		20	65	1
Boron	ppm	ASTM D5185m	2	12	12	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	2	3	2
Manganese	ppm	ASTM D5185m	0	0	1	<1
Magnesium	ppm	ASTM D5185m	9	14	32	43
Calcium	ppm	ASTM D5185m	3114	2516	2613	3106
Phosphorus	ppm	ASTM D5185m	1099	840	875	1046
Zinc	ppm	ASTM D5185m	1245	1153	1247	1195
Sulfur	ppm	ASTM D5185m	7086	3304	5308	4235
Visc @ 40°C	cSt	ASTM D445	213.9	● 90.5	142	159



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0126272 **Received** : 02 Jul 2024
Lab Number : 06226611 **Tested** : 03 Jul 2024
Unique Number : 11110104 **Diagnosed** : 05 Jul 2024 - Don Baldridge
Test Package : MOB 1 (Additional Tests: KF)

Kemp Quarries - Kemp Stone - Neosho
 19148 Ingersol Lane
 Neosho, MO
 US 64850
 Contact: NEOSHO NOTIFICATIONS
 neosho@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: