



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[70473]

Machine Id

TTH038

Component

Left Final Drive

Fluid

PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

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		PCA0109204	PCA0109002	PCA0070657
Sample Date		Client Info		13 Jun 2024	13 Mar 2024	05 Dec 2023
Machine Age	hrs	Client Info		1473	942	453
Oil Age	hrs	Client Info		1473	942	453
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	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	200	139	88
Chromium	ppm	ASTM D5185m	>10	3	2	1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	4	4	1
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>50	<1	<1	0
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

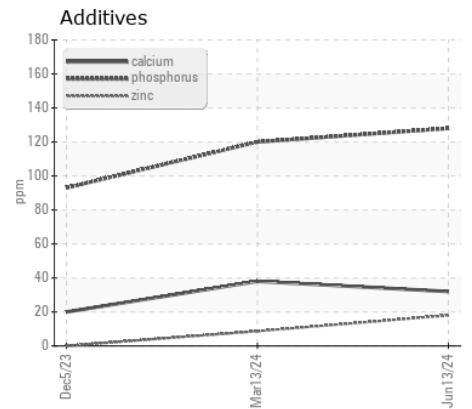
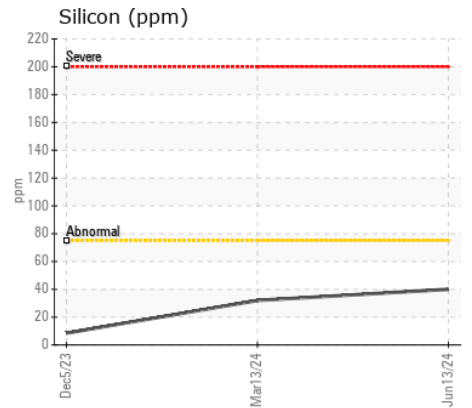
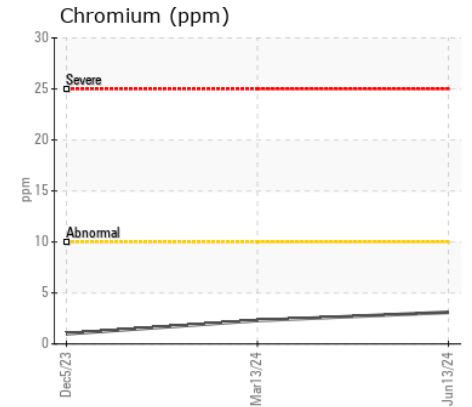
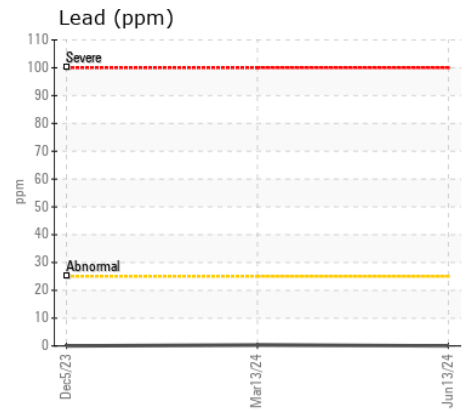
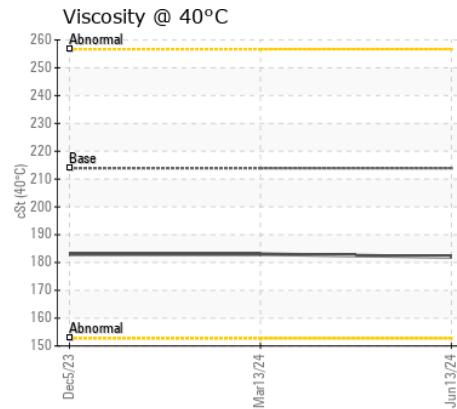
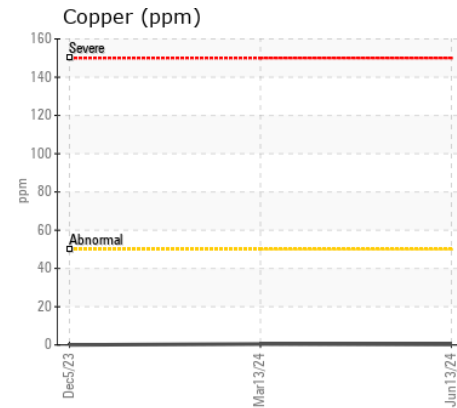
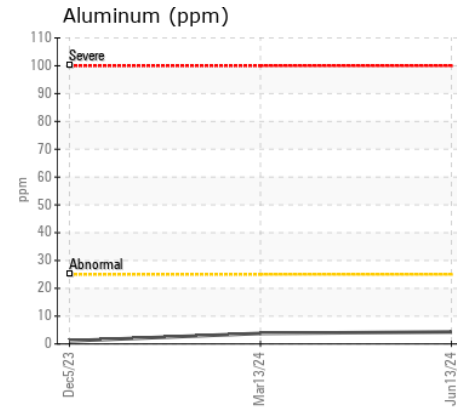
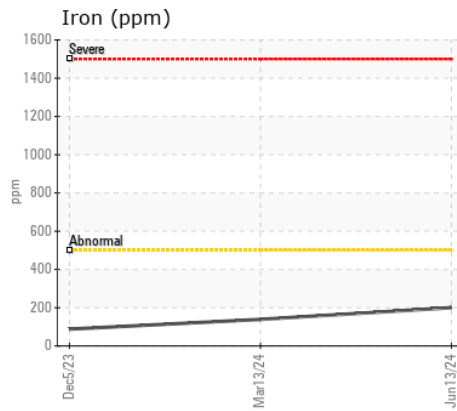
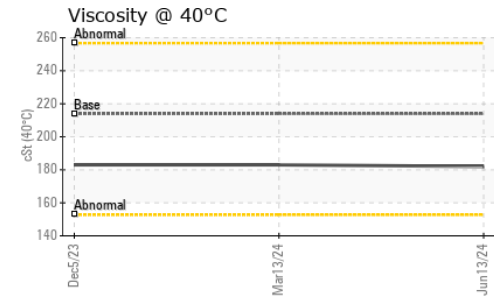
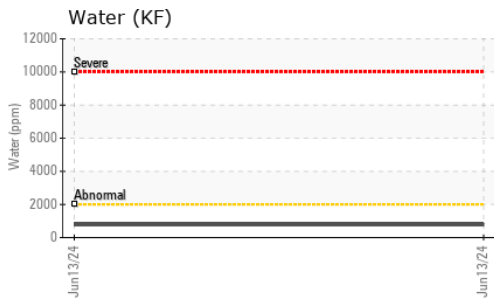
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	40	32	8
Potassium	ppm	ASTM D5185m	>20	6	5	2
Water	%	ASTM D6304	>0.2	0.078	---	---
ppm Water	ppm	ASTM D6304	>2000	780	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	0.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		4	4	0
Boron	ppm	ASTM D5185m	2	0	<1	0
Barium	ppm	ASTM D5185m	0	5	4	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	4	2	1
Magnesium	ppm	ASTM D5185m	9	<1	<1	<1
Calcium	ppm	ASTM D5185m	3114	32	38	20
Phosphorus	ppm	ASTM D5185m	1099	128	120	93
Zinc	ppm	ASTM D5185m	1245	18	9	0
Sulfur	ppm	ASTM D5185m	7086	15334	14877	13865
Visc @ 40°C	cSt	ASTM D445	213.9	182	183	183



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109204 **Received** : 20 Jun 2024
Lab Number : 06216397 **Tested** : 22 Jun 2024
Unique Number : 11089261 **Diagnosed** : 23 Jun 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: KF)

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