



OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**[70412]**

Machine Id  
**CRN032**

Component  
**Front Left Final Drive**

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

**RECOMMENDATION**

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: New purchase PM-4 changed fluid )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0109355</b>	---	---
Sample Date		Client Info		<b>11 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>3980</b>	---	---
Oil Age	hrs	Client Info		<b>3980</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

The copper level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>280</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>11</b>	---	---
Lead	ppm	ASTM D5185m	>25	<b>4</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>75</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

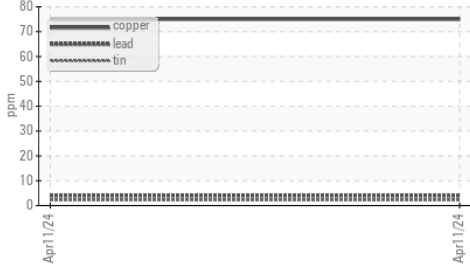
Silicon	ppm	ASTM D5185m	>75	<b>85</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

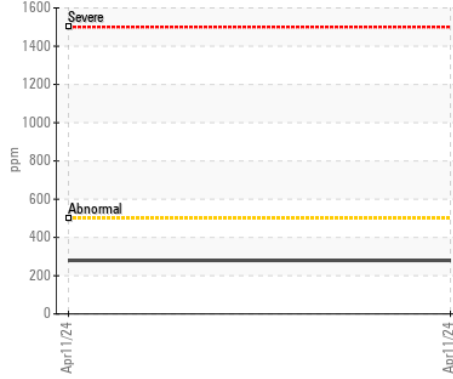
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	---	---
Boron	ppm	ASTM D5185m	2	<b>137</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>4</b>	---	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m	0	<b>4</b>	---	---
Magnesium	ppm	ASTM D5185m	9	<b>4</b>	---	---
Calcium	ppm	ASTM D5185m	3114	<b>72</b>	---	---
Phosphorus	ppm	ASTM D5185m	1099	<b>930</b>	---	---
Zinc	ppm	ASTM D5185m	1245	<b>52</b>	---	---
Sulfur	ppm	ASTM D5185m	7086	<b>24708</b>	---	---
Visc @ 40°C	cSt	ASTM D445	213.9	<b>143</b>	---	---

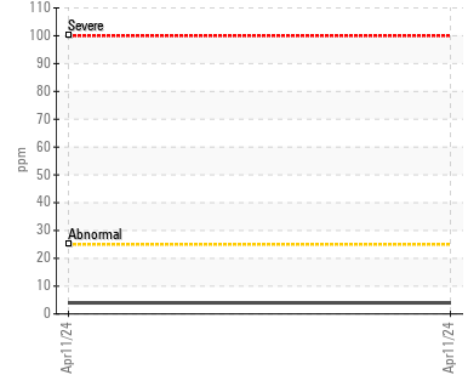
▲ Non-ferrous Metals



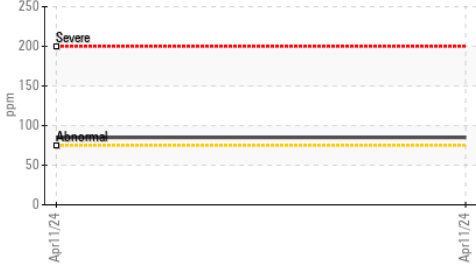
Iron (ppm)



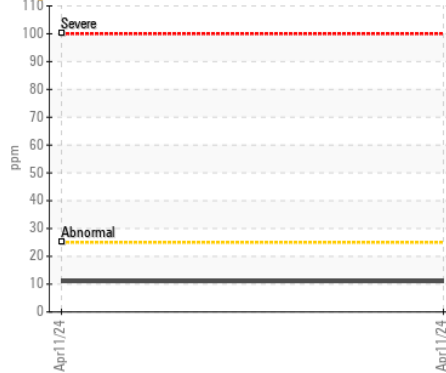
Lead (ppm)



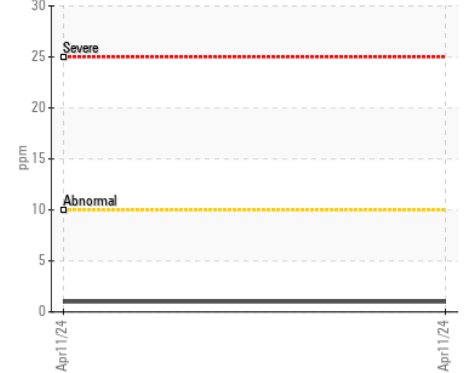
▲ Silicon (ppm)



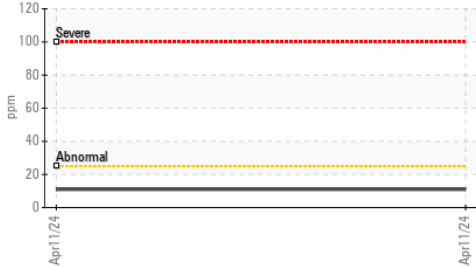
● Aluminum (ppm)



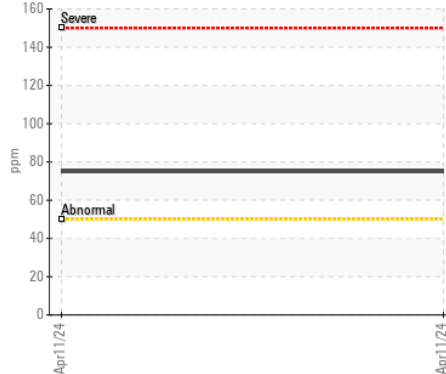
Chromium (ppm)



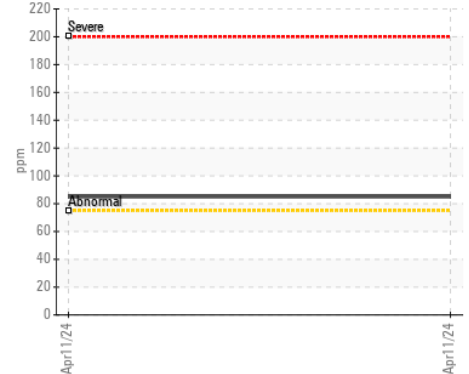
● Aluminum (ppm)



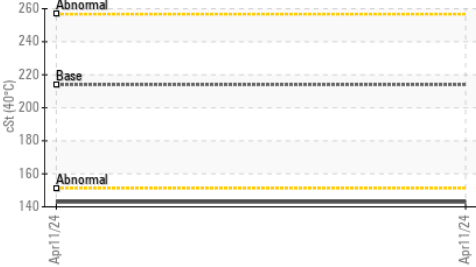
▲ Copper (ppm)



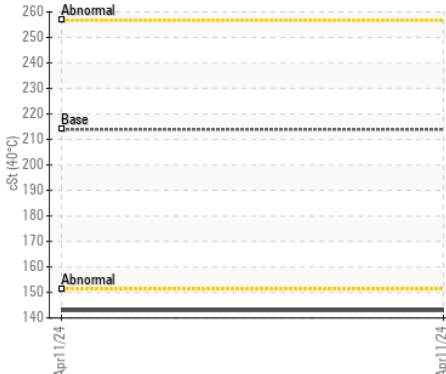
▲ Silicon (ppm)



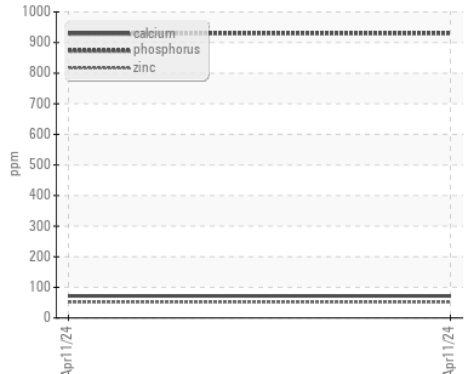
Viscosity @ 40°C



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PCA0109355  
 Lab Number : 06156360  
 Unique Number : 10991783  
 Test Package : MOB 1

Received : 22 Apr 2024  
 Tested : 23 Apr 2024  
 Diagnosed : 24 Apr 2024 - Sean Felton

**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: