



OIL ANALYSIS REPORT

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



Area  
**[68978]**  
 Machine Id  
**OHT101**  
 Component  
**Middle Differential**  
 Fluid  
**PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: PM-1 sampled fluid )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0109337</b>	PCA0084716	PCA0062493
Sample Date		Client Info		<b>04 Apr 2024</b>	19 Oct 2023	13 Apr 2022
Machine Age	hrs	Client Info		<b>17749</b>	17273	16935
Oil Age	hrs	Client Info		<b>17749</b>	17827	16717
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>28</b>	60	98
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>30	<b>3</b>	<1	1
Lead	ppm	ASTM D5185m	>13	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>103	<b>14</b>	53	40
Tin	ppm	ASTM D5185m	>5	<b>1</b>	3	3
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

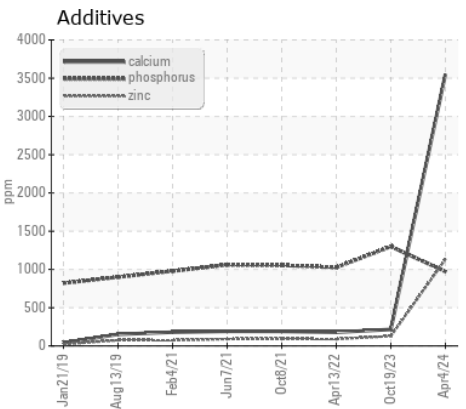
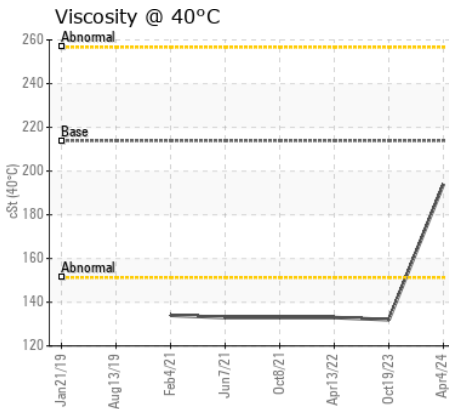
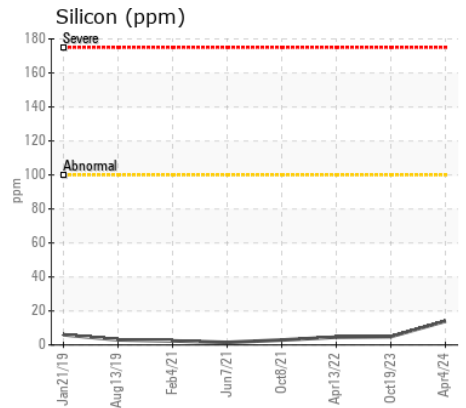
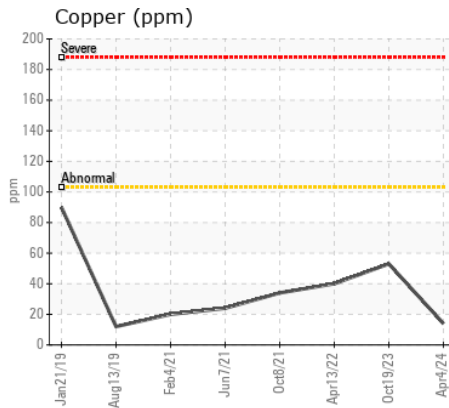
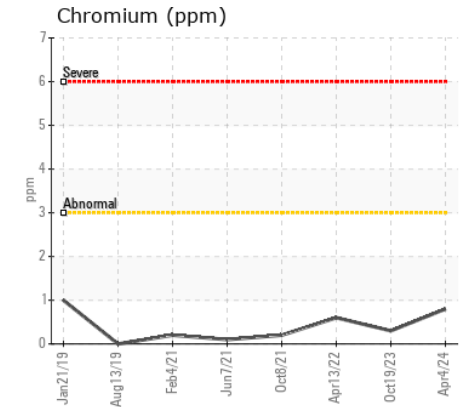
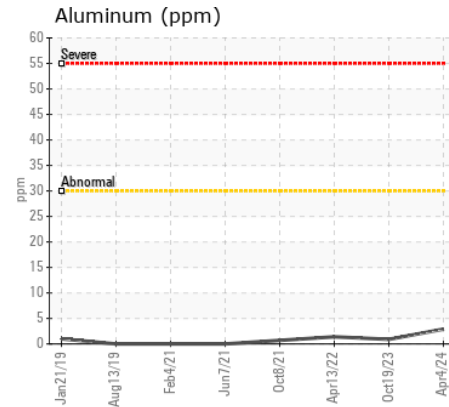
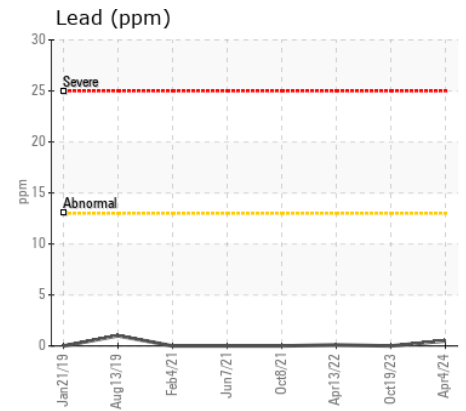
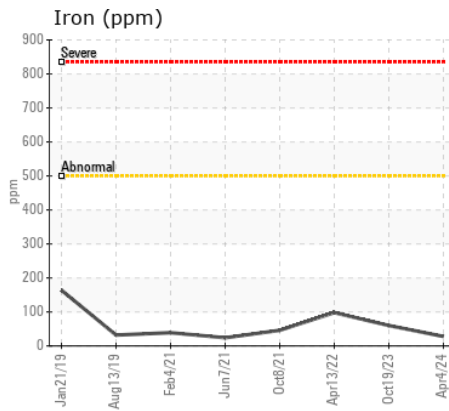
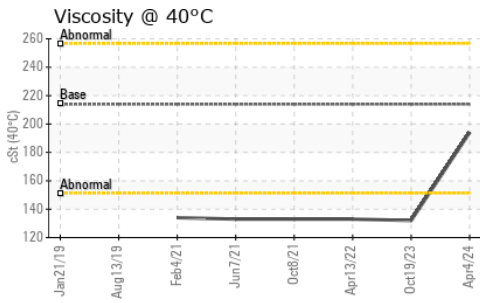
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	<b>14</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Boron	ppm	ASTM D5185m	2	<b>22</b>	216	165
Barium	ppm	ASTM D5185m	0	<b>1</b>	19	0
Molybdenum	ppm	ASTM D5185m	0	<b>5</b>	13	11
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	9	<b>16</b>	8	6
Calcium	ppm	ASTM D5185m	3114	<b>3550</b>	216	179
Phosphorus	ppm	ASTM D5185m	1099	<b>973</b>	1299	1026
Zinc	ppm	ASTM D5185m	1245	<b>1133</b>	128	89
Sulfur	ppm	ASTM D5185m	7086	<b>5487</b>	41735	20531
Visc @ 40°C	cSt	ASTM D445	213.9	<b>194</b>	132	133



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : PCA0109337  
 Lab Number : 06149071  
 Unique Number : 10979149  
 Test Package : MOB 1

Received : 15 Apr 2024  
 Tested : 16 Apr 2024  
 Diagnosed : 17 Apr 2024 - Sean Felton

**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)

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F: