



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



Area  
**KEMP QUARRIES / NEOSHO [68014]**

Machine Id  
**WL111**

Component  
**Rear 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. Oil extremely overfilled coming out vent )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>PCA0086526</b>	PCA0084707	PCA0086321
Sample Date		Client Info		<b>06 Feb 2024</b>	10 Oct 2023	19 Jun 2023
Machine Age	hrs	Client Info		<b>30222</b>	29750	29243
Oil Age	hrs	Client Info		<b>30222</b>	29750	29243
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
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>48</b>	165	152
Chromium	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>1</b>	2	<1
Lead	ppm	ASTM D5185m	>13	<b>0</b>	2	<1
Copper	ppm	ASTM D5185m	>103	<b>7</b>	68	54
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

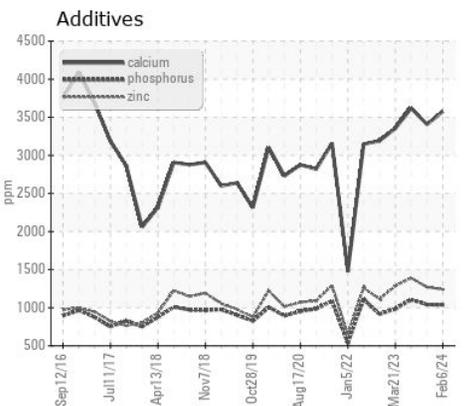
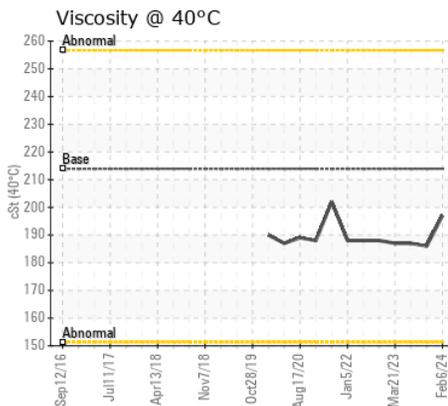
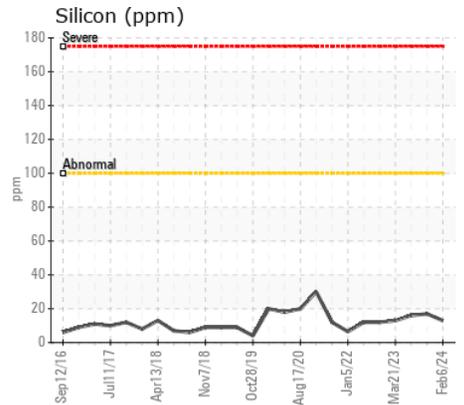
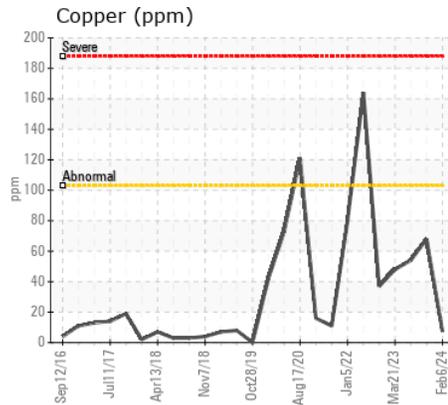
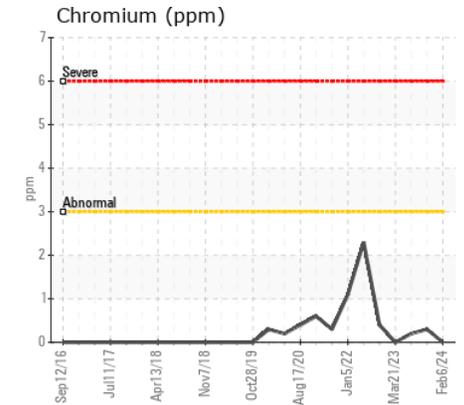
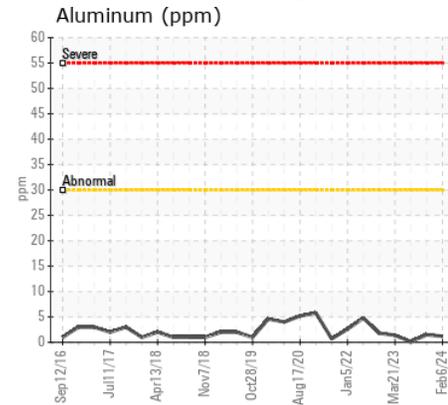
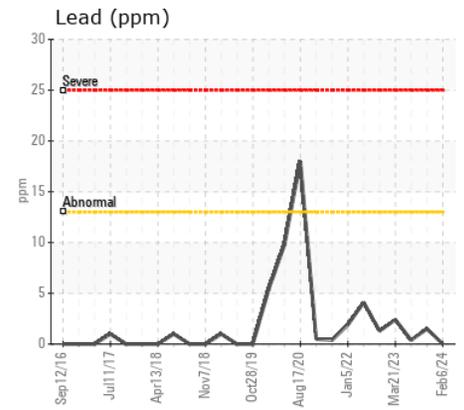
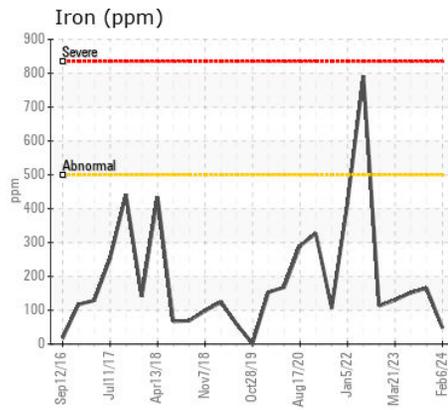
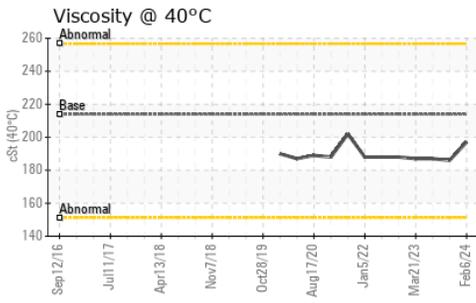
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	<b>13</b>	17	16
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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>	0	1
Boron	ppm	ASTM D5185m	2	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	9	14
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	9	<b>17</b>	15	30
Calcium	ppm	ASTM D5185m	3114	<b>3577</b>	3408	3619
Phosphorus	ppm	ASTM D5185m	1099	<b>1037</b>	1042	1105
Zinc	ppm	ASTM D5185m	1245	<b>1242</b>	1270	1389
Sulfur	ppm	ASTM D5185m	7086	<b>4685</b>	5112	5364
Visc @ 40°C	cSt	ASTM D445	213.9	<b>197</b>	186	187



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0086526  
**Lab Number** : 06088406  
**Unique Number** : 10875851  
**Test Package** : MOB 1

**Received** : 13 Feb 2024  
**Tested** : 14 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Sean Felton

**Kemp Quarries - Kemp Stone - Neosho**  
 19148 Ingersol Lane  
 Neosho, MO  
 US 64850  
 Contact:

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)

neosho@kempstone.com

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