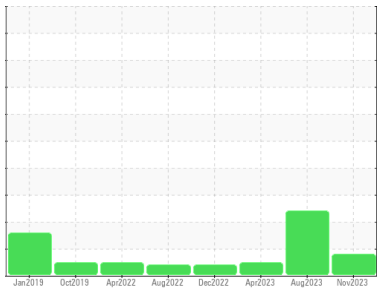
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
KEMP QUARRIES / RIVER VALLEY ARKOMA
Machine Id
OHT102
Component
Front Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

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

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PCA0084416**	PCA0083936	PCA0070400
Sample Date		Client Info		**06 Nov 2023**	22 Aug 2023	20 Apr 2023
Machine Age	hrs	Client Info		**29340**	29115	28531
Oil Age	hrs	Client Info		**28531**	29115	27903
Oil Changed		Client Info		**Not Changd**	Not Changd	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**143**	142	292
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	2
Nickel	ppm	ASTM D5185m	>10	**<1**	<1	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	0
Lead	ppm	ASTM D5185m	>25	**0**	2	0
Copper	ppm	ASTM D5185m	>100	▲ **167**	▲ 151	89
Tin	ppm	ASTM D5185m	>10	**5**	5	3
Vanadium	ppm	ASTM D5185m		**<1**	<1	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	**68**	89	213
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**2**	2	14
Manganese	ppm	ASTM D5185m	0	**1**	1	2
Magnesium	ppm	ASTM D5185m	9	**11**	4	3
Calcium	ppm	ASTM D5185m	3114	**3393**	▲ 3430	18
Phosphorus	ppm	ASTM D5185m	1099	**998**	928	1008
Zinc	ppm	ASTM D5185m	1245	**1127**	▲ 1076	19
Sulfur	ppm	ASTM D5185m	7086	**4788**	▲ 6645	21118

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	**18**	18	9
Sodium	ppm	ASTM D5185m		**0**	<1	<1
Potassium	ppm	ASTM D5185m	>20	**3**	2	1

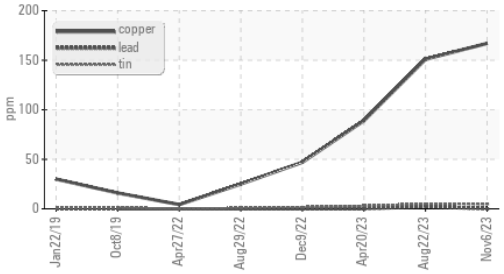
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	MODER
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	▲ MODER	NONE
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	>.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	**188**	190	138

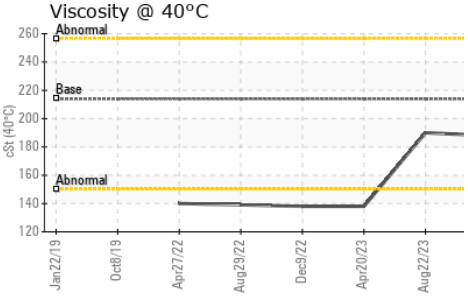
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Non-ferrous Metals



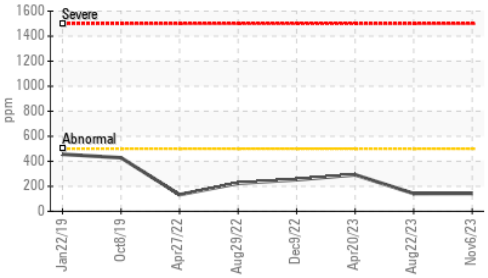
Viscosity @ 40°C



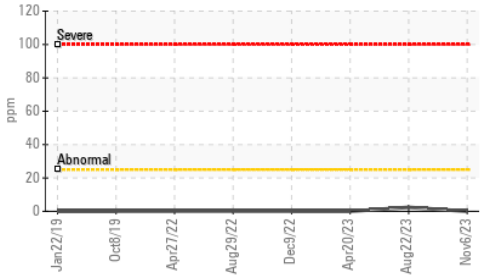
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

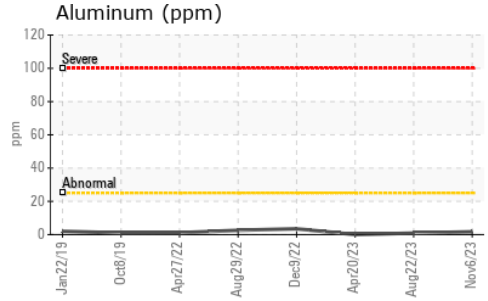
Iron (ppm)



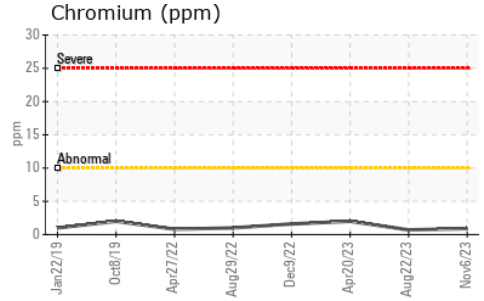
Lead (ppm)



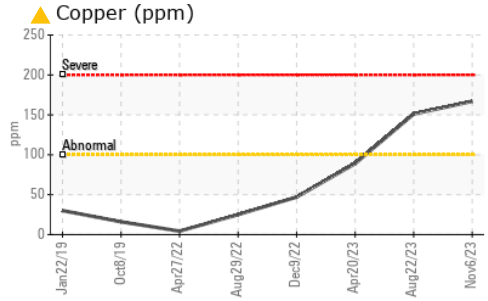
Aluminum (ppm)



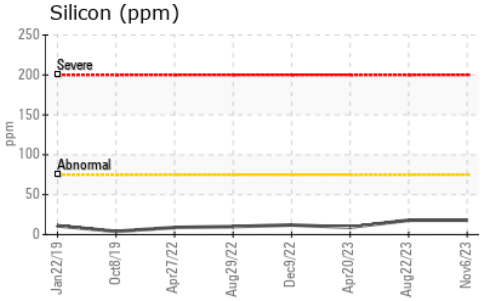
Chromium (ppm)



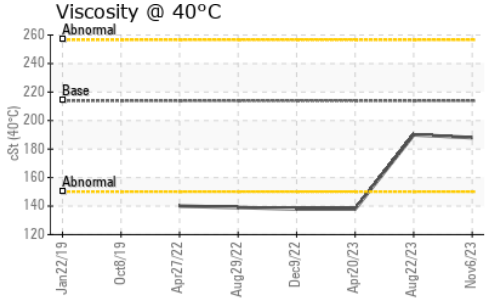
Copper (ppm)



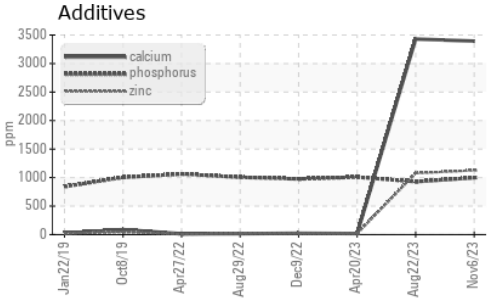
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084416
Lab Number : 06007921
Unique Number : 10741683
Test Package : MOB 1

Received : 14 Nov 2023
Diagnosed : 16 Nov 2023
Diagnostician : Don Baldridge

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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US 74804
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Report Id: KEMSHA [WUSCAR] 06007921 (Generated: 11/16/2023 18:02:36) Rev: 1

Submitted By: