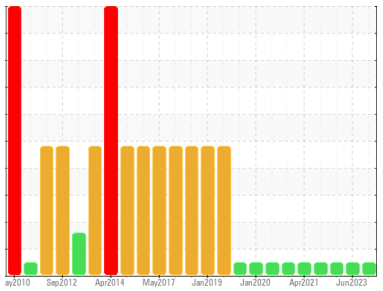
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
KEMP QUARRIES / MUSKOGEE SAND [65225]
Machine Id
WL015
Component
Rear Right Final Drive
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. (Customer Sample Comment: PM-2 sampled fluid)

Wear
All 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		**PCA0087057**	PCA0087117	PCA0087173
Sample Date		Client Info		**25 Oct 2023**	03 Jun 2023	16 Feb 2023
Machine Age	hrs	Client Info		**2234**	1895	1210
Oil Age	hrs	Client Info		**2234**	685	2000
Oil Changed		Client Info		**N/A**	Not Changd	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	**87**	50	132
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**<1**	0	<1
Titanium	ppm	ASTM D5185m	>15	**<1**	<1	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>75	**2**	2	5
Lead	ppm	ASTM D5185m	>10	**<1**	<1	2
Copper	ppm	ASTM D5185m	>75	**12**	7	12
Tin	ppm	ASTM D5185m	>8	**2**	0	<1
Antimony	ppm	ASTM D5185m	>50	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	**1**	0	14
Barium	ppm	ASTM D5185m	0	**19**	0	0
Molybdenum	ppm	ASTM D5185m	0	**2**	<1	4
Manganese	ppm	ASTM D5185m	0	**1**	<1	2
Magnesium	ppm	ASTM D5185m	9	**22**	15	50
Calcium	ppm	ASTM D5185m	3114	**3494**	2953	2780
Phosphorus	ppm	ASTM D5185m	1099	**1107**	880	984
Zinc	ppm	ASTM D5185m	1245	**1296**	1053	1153
Sulfur	ppm	ASTM D5185m	7086	**9312**	5436	14468

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	**20**	14	26
Sodium	ppm	ASTM D5185m		**<1**	0	4
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	1

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
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	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

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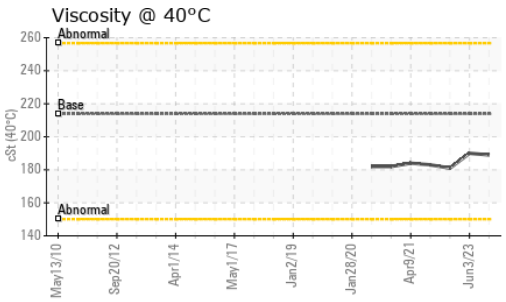
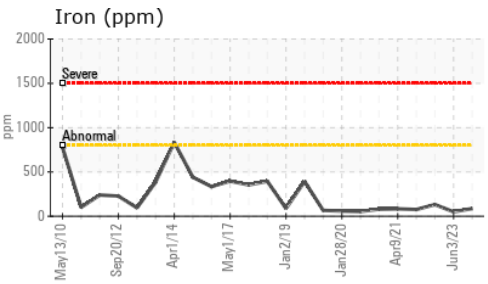
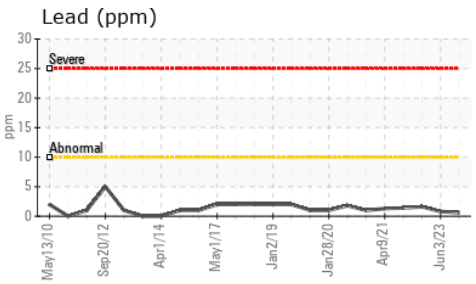


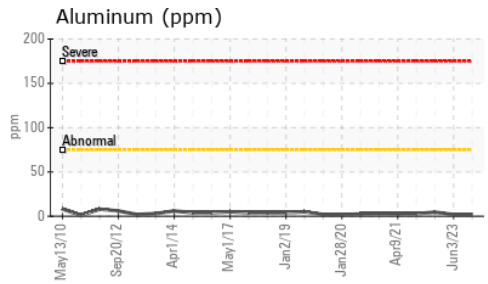
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	**189**	190	181

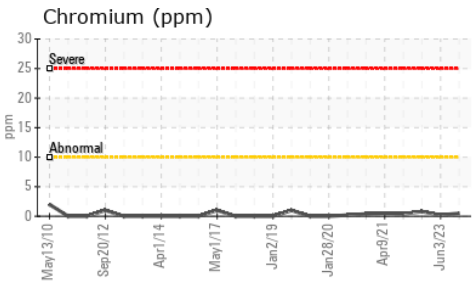
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

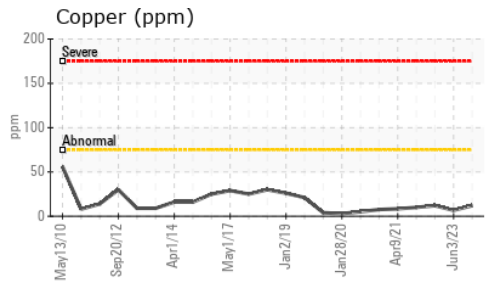
GRAPHS

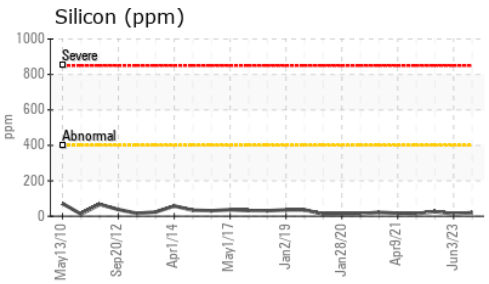


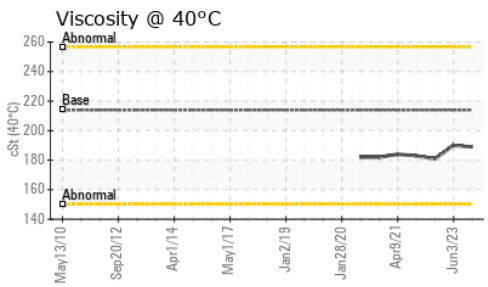


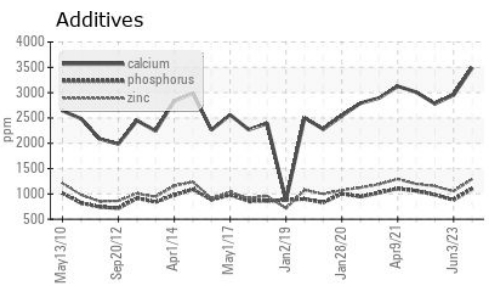












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0087057
Lab Number : 05993859
Unique Number : 10722219
Test Package : MOB 1

Received : 30 Oct 2023
Diagnosed : 01 Nov 2023
Diagnostician : Sean Felton

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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