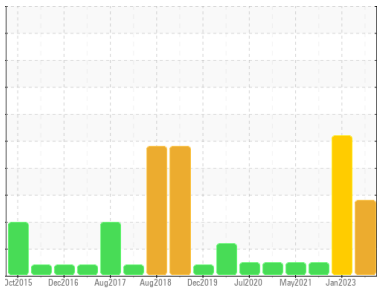
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
[66779]
Machine Id
OHT045
Component
Right Final Drive
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. (Customer Sample Comment: PM-3 sampled fluid)

Wear
Bearing and/or bushing wear is indicated.

Contamination
There is a light concentration of water present in the oil.

Fluid Condition
The oil viscosity is lower than normal. Confirm oil type.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		**PCA0126271**	PCA0062024	PCA0037606
Sample Date	Client Info		**25 Jun 2024**	18 Jan 2023	14 Apr 2022
Machine Age hrs	Client Info		**3951**	3426	2905
Oil Age hrs	Client Info		**3951**	10014	2905
Oil Changed	Client Info		**N/A**	N/A	N/A
Sample Status			**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>800	**36**	69	22
Chromium	ppm	ASTM D5185m	>10	**2**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**<1**	0	<1
Titanium	ppm	ASTM D5185m	>15	**0**	<1	<1
Silver	ppm	ASTM D5185m	>2	**<1**	<1	<1
Aluminum	ppm	ASTM D5185m	>75	**3**	3	2
Lead	ppm	ASTM D5185m	>10	**6**	▲ 10	2
Copper	ppm	ASTM D5185m	>75	▲ **150**	▲ 74	3
Tin	ppm	ASTM D5185m	>8	**2**	1	<1
Antimony	ppm	ASTM D5185m	>50	**---**	---	---
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	**15**	9	3
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**2**	4	2
Manganese	ppm	ASTM D5185m	0	**0**	1	<1
Magnesium	ppm	ASTM D5185m	9	**17**	32	47
Calcium	ppm	ASTM D5185m	3114	**2869**	2645	3140
Phosphorus	ppm	ASTM D5185m	1099	**970**	891	1059
Zinc	ppm	ASTM D5185m	1245	**1339**	1263	1242
Sulfur	ppm	ASTM D5185m	7086	**3797**	5451	4312

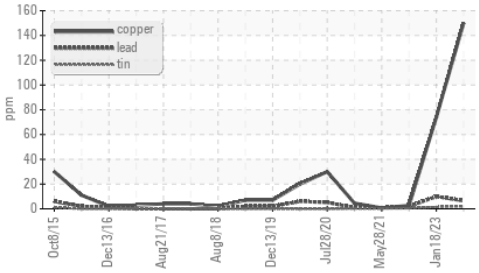
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>400	**14**	39	21
Sodium	ppm	ASTM D5185m		**23**	70	1
Potassium	ppm	ASTM D5185m	>20	**2**	4	0
Water	%	ASTM D6304	>0.2	▲ **0.387**	▲ 0.488	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3870**	▲ 4880	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	MODER
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**	▲ 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	>0.2	**0.2%**	0.2%	NEG
Free Water	scalar	*Visual		**NEG**	▲ >10%	NEG

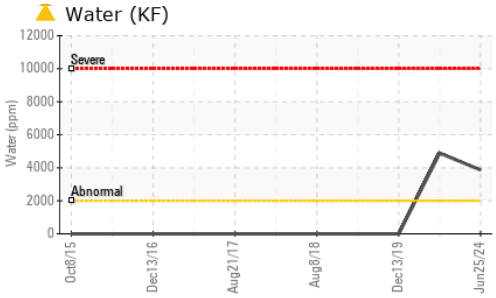
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

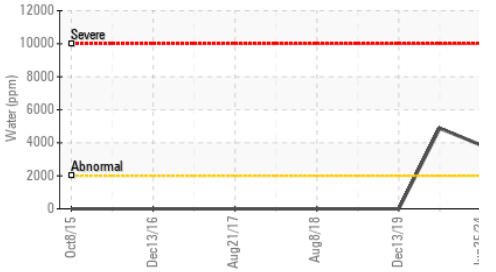
Non-ferrous Metals



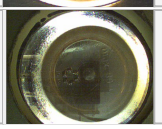
Water (KF)



Water (KF)

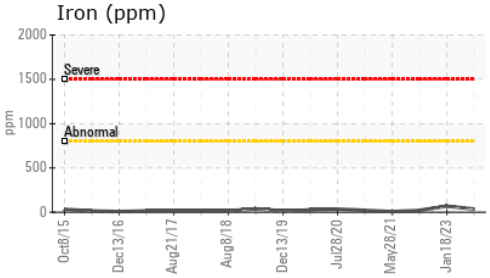


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	**90.7**	139	160

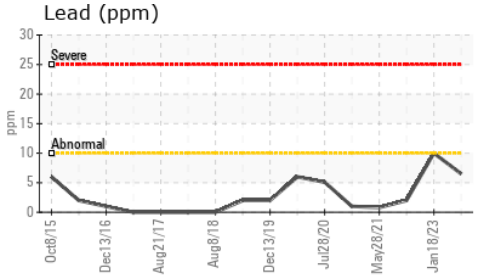
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image		no image
Bottom			no image		no image

GRAPHS

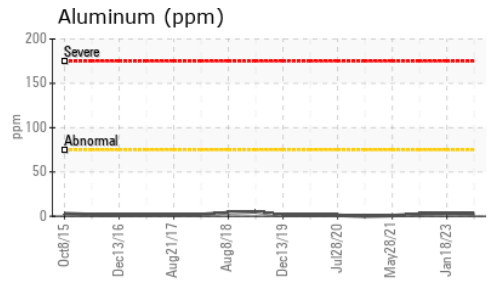
Iron (ppm)



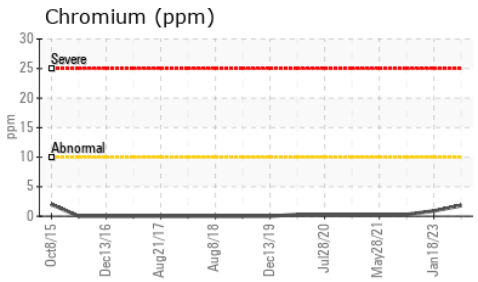
Lead (ppm)



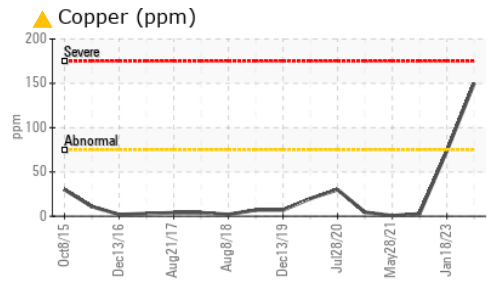
Aluminum (ppm)



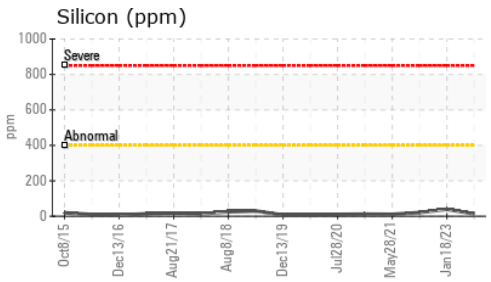
Chromium (ppm)



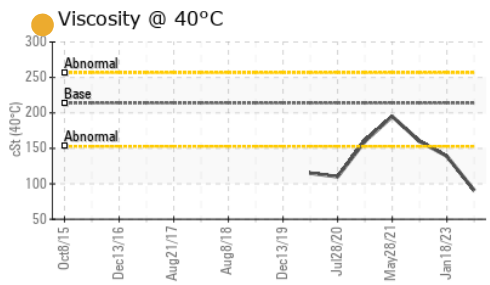
Copper (ppm)



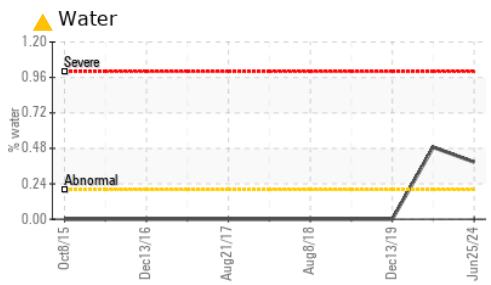
Silicon (ppm)



Viscosity @ 40°C



Water



ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0126271
Lab Number : 06226609
Unique Number : 11110102
Test Package : MOB 1 (Additional Tests: KF)

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 05 Jul 2024 - 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)

Kemp Quarries - Kemp Stone - Neosho
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Neosho, MO
US 64850
Contact: NEOSHO NOTIFICATIONS
neosho@kempstone.com
T:
F:

Report Id: KEMNEO [WUSCAR] 06226609 (Generated: 07/05/2024 13:08:44) Rev: 1

Submitted By: