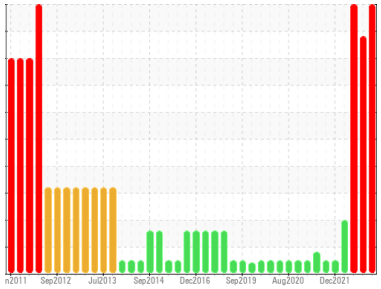
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

Area
KEMP QUARRIES / PRYOR STONE [62048]
Machine Id
OHT058
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 68 (--- GAL)

Sample Rating Trend



VISUAL METAL

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: Pm2 performed. All oil samples taken. Engine oil, transmission oil, and all filters changed.)

Wear
The iron level has decreased, but is still severe. Moderate concentration of visible metal present.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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		**PCA0083984**	PCA0049015	PCA0062517
Sample Date		Client Info		**05 May 2023**	07 Nov 2022	10 Jun 2022
Machine Age	hrs	Client Info		**50583**	50124	49501
Oil Age	hrs	Client Info		**1082**	623	2083
Oil Changed		Client Info		**Oil Added**	Oil Added	Changed
Sample Status				**SEVERE**	SEVERE	SEVERE

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	⬢ **268**	⬢ 470	⬢ 176
Chromium	ppm	ASTM D5185m	>10	**<1**	1	<1
Nickel	ppm	ASTM D5185m	>10	**1**	0	2
Titanium	ppm	ASTM D5185m		**<1**	<1	1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>10	▲ **17**	▲ 7	▲ 30
Lead	ppm	ASTM D5185m	>10	**<1**	<1	2
Copper	ppm	ASTM D5185m	>75	**12**	17	29
Tin	ppm	ASTM D5185m	>10	**2**	<1	1
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	0	**0**	<1	<1
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**<1**	0	<1
Manganese	ppm	ASTM D5185m	0	**2**	3	1
Magnesium	ppm	ASTM D5185m	0	**3**	2	7
Calcium	ppm	ASTM D5185m	50	**74**	70	46
Phosphorus	ppm	ASTM D5185m	330	**366**	299	308
Zinc	ppm	ASTM D5185m	430	**439**	360	283
Sulfur	ppm	ASTM D5185m	760	**1113**	896	661

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ **46**	▲ 43	⬢ 77
Sodium	ppm	ASTM D5185m		**1**	0	2
Potassium	ppm	ASTM D5185m	>20	**3**	3	13

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	⬢ **MODER**	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**	▲ 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	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	67.4	**66.5**	66.2	66.5

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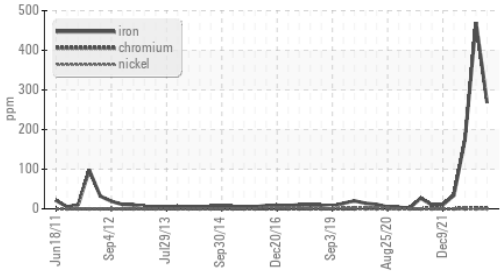
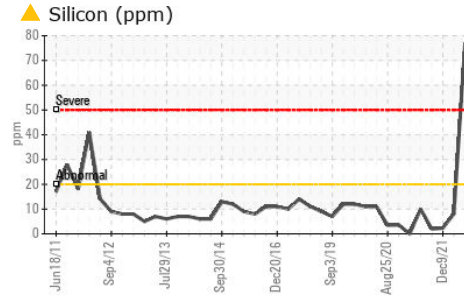
Ferrous Alloys



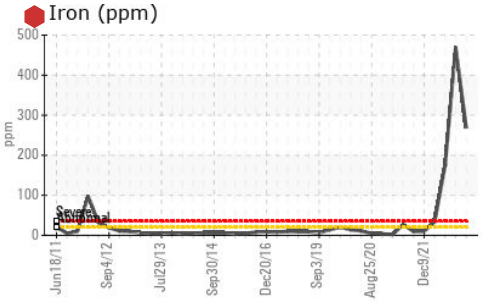
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS

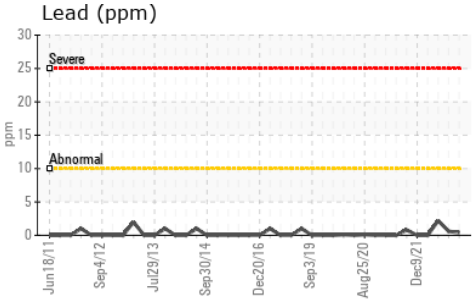
Silicon (ppm)



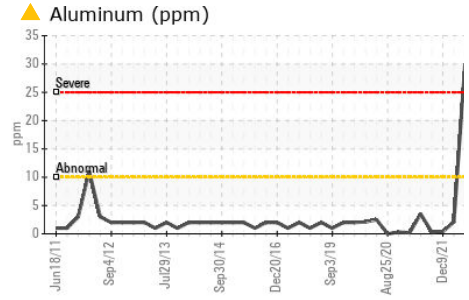
Iron (ppm)



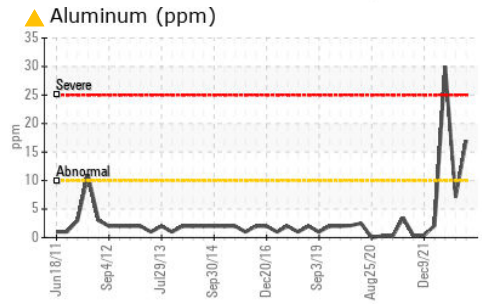
Lead (ppm)



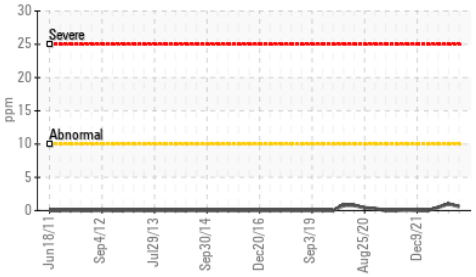
Aluminum (ppm)



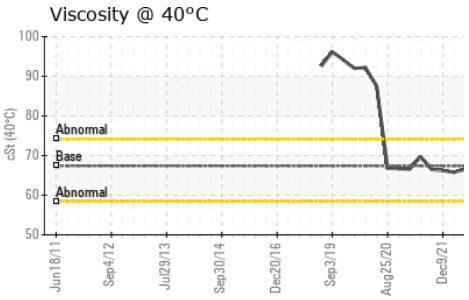
Aluminum (ppm)



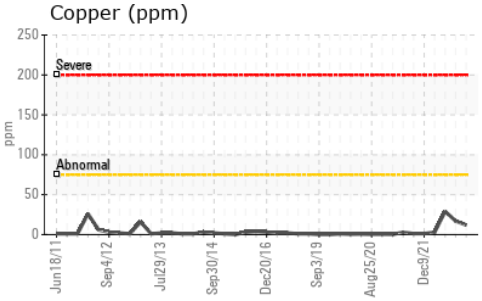
Chromium (ppm)



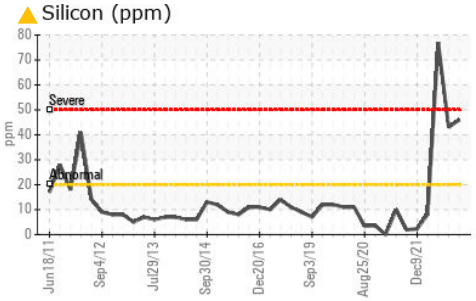
Viscosity @ 40°C



Copper (ppm)



Silicon (ppm)



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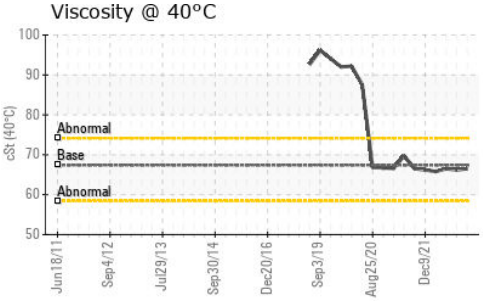
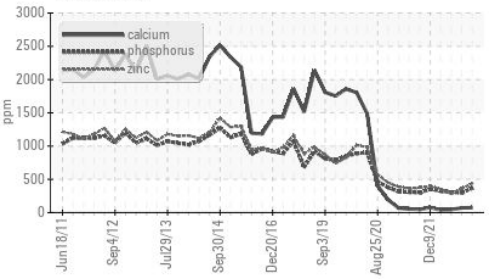


Additives



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: PCA0083984	**Received**	: 05 Jun 2023
Lab Number	: 05865377	**Diagnosed**	: 07 Jun 2023
Unique Number	: 10499842	**Diagnostician**	: Don Baldridge
Test Package	: MOB 1		

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 74361
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T:
F:

Report Id: KEMPRY [WUSCAR] 05865377 (Generated: 08/10/2023 12:26:36) Rev: 1

Submitted By: