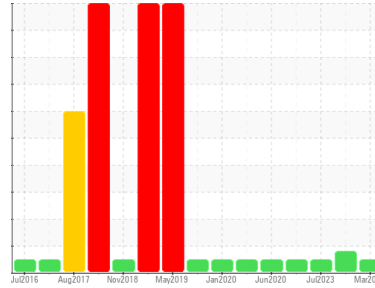


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
KEMP QUARRIES / PRYOR STONE [68778]
Machine Id
OHT093
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Pm1 performed. All oil samples taken. Engine oil, engine oil filters, fuel filters, air filters, and cabin air filter changed.)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0086615	PCA0084391	PCA0084041
Sample Date	Client Info		16 Mar 2024	05 Dec 2023	25 Jul 2023
Machine Age	hrs	Client Info	1650	16093	15337
Oil Age	hrs	Client Info	557	756	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	69	62	16
Chromium	ppm	ASTM D5185m >20	2	1	<1
Nickel	ppm	ASTM D5185m >2	2	2	<1
Titanium	ppm	ASTM D5185m >2	<1	0	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >25	3	2	2
Lead	ppm	ASTM D5185m >40	3	3	2
Copper	ppm	ASTM D5185m >330	153	▲ 658	6
Tin	ppm	ASTM D5185m >15	3	3	1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	0
Barium	ppm	ASTM D5185m	1	<1	<1
Molybdenum	ppm	ASTM D5185m	73	68	57
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	1072	1001	896
Calcium	ppm	ASTM D5185m	1284	1111	1030
Phosphorus	ppm	ASTM D5185m	1155	1117	980
Zinc	ppm	ASTM D5185m	1417	1334	1156
Sulfur	ppm	ASTM D5185m	3261	2852	3155

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	10	15	19
Sodium	ppm	ASTM D5185m	0	3	4
Potassium	ppm	ASTM D5185m >20	2	2	2

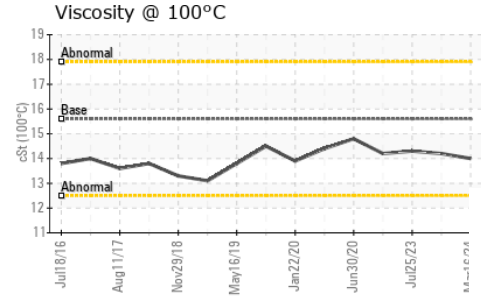
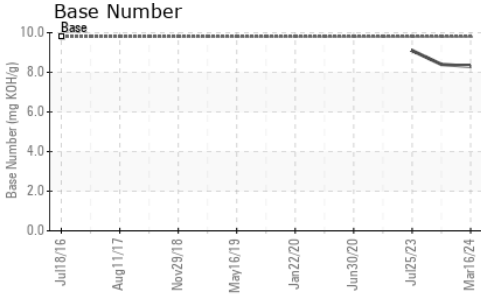
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	0.5	0.1
Nitration	Abs/cm	*ASTM D7624 >20	9.9	10.3	4.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.0	21.8	17.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.0	21.5	13.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.3	8.4	9.1

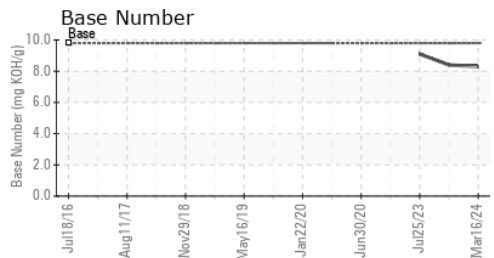
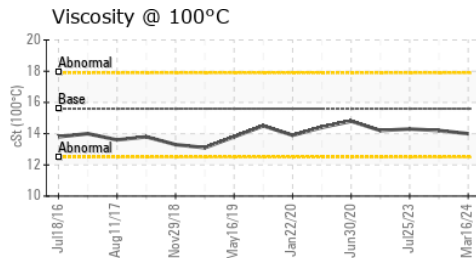
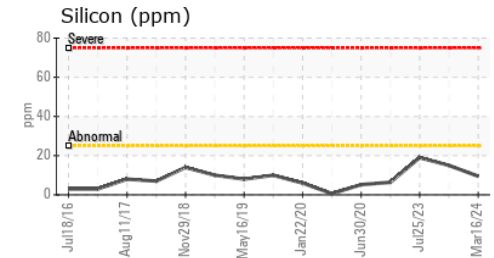
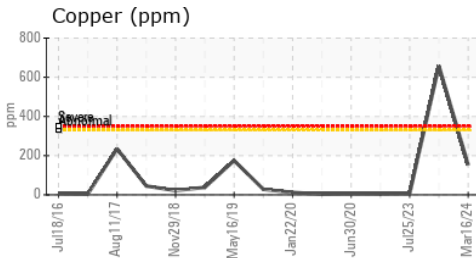
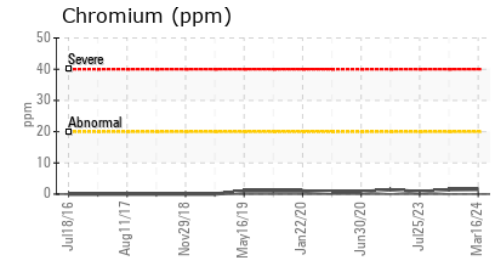
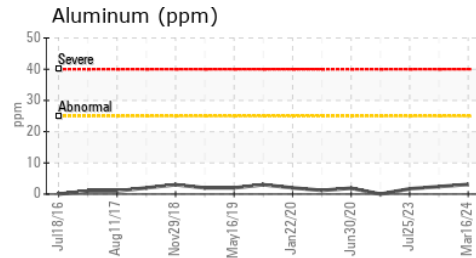
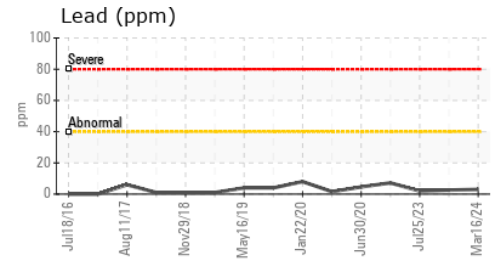
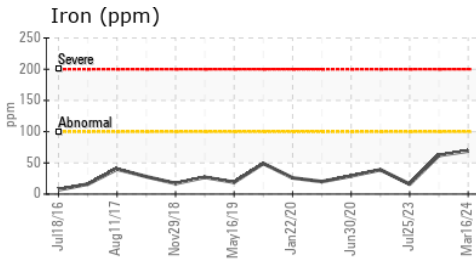
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.6	14.0	14.2	14.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086615 **Received** : 25 Mar 2024
Lab Number : **06128443** **Tested** : 26 Mar 2024
Unique Number : 10942594 **Diagnosed** : 28 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

Kemp Quarries - Pryor Stone - Pryor
 1050 E 520 Rd
 Pryor, OK
 US 74361
 Contact:
 pryor@pryorstone.com

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)