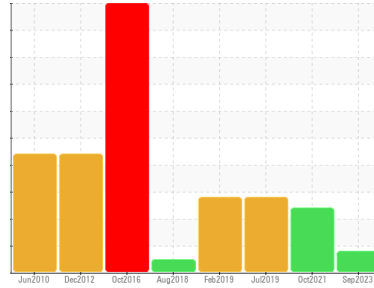


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / PRYOR STONE [66330]
Machine Id
TTT004
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

Sample Rating Trend



FUEL



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: PM-4 changed fluid and filters)

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring.

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	PCA0086485	PCA0011190	PCA14234038
Sample Date	Client Info	20 Sep 2023	08 Oct 2021	23 Jul 2019
Machine Age	hrs	5517	5517	4737
Oil Age	hrs	5517	4737	323
Oil Changed	Client Info	Changed	Changed	N/A
Sample Status		MARGINAL	SEVERE	SEVERE

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	0.0

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >100	50	36	41
Chromium	ppm	ASTM D5185m >20	2	<1	1
Nickel	ppm	ASTM D5185m >2	0	<1	0
Titanium	ppm	ASTM D5185m >2	<1	<1	0
Silver	ppm	ASTM D5185m >2	1	<1	0
Aluminum	ppm	ASTM D5185m >25	<1	4	3
Lead	ppm	ASTM D5185m >40	4	20	7
Copper	ppm	ASTM D5185m >330	8	4	4
Tin	ppm	ASTM D5185m >15	2	<1	0
Antimony	ppm	ASTM D5185m	---	0	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	<1	7	33
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	55	52	33
Manganese	ppm	ASTM D5185m 0	2	<1	0
Magnesium	ppm	ASTM D5185m 1010	937	832	439
Calcium	ppm	ASTM D5185m 1070	1216	957	1509
Phosphorus	ppm	ASTM D5185m 1150	1006	910	669
Zinc	ppm	ASTM D5185m 1270	1303	1070	787
Sulfur	ppm	ASTM D5185m 2060	3256	2356	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	13	5	12
Sodium	ppm	ASTM D5185m	5	4	4
Potassium	ppm	ASTM D5185m >20	2	<1	2
Fuel	%	ASTM D3524 >5	▲ 4.3	◆ 10.4	◆ 5.84

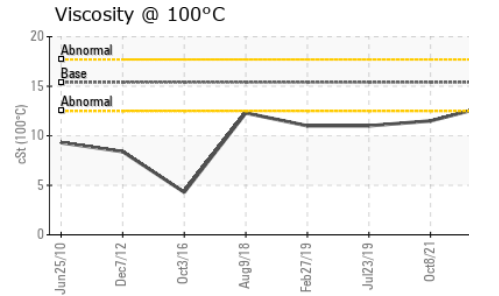
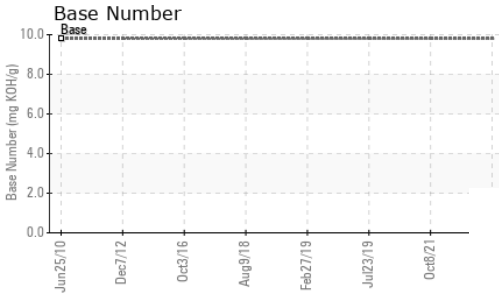
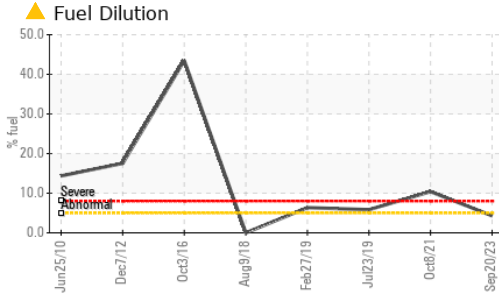
INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844 >3	0.4	0.4	0.75
Nitration	Abs/cm	*ASTM D7624 >20	7.0	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.1	18.3	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.8	13.5	2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.1	---	---

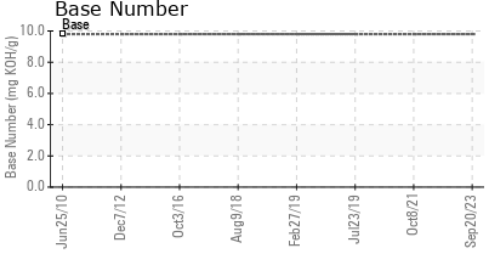
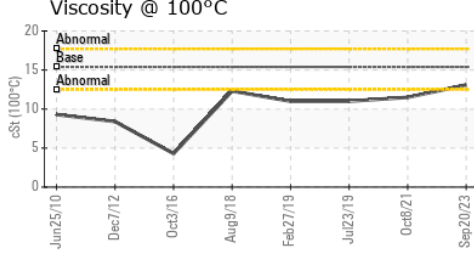
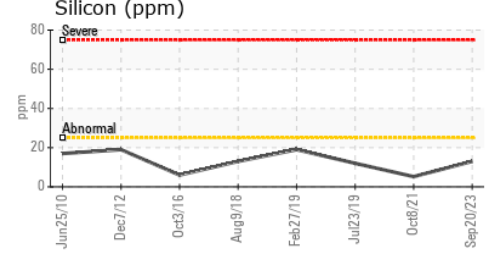
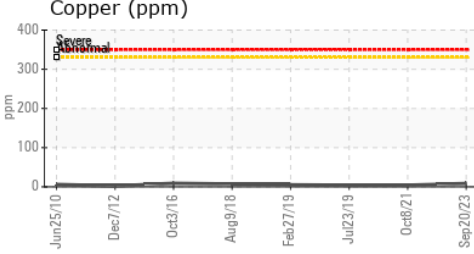
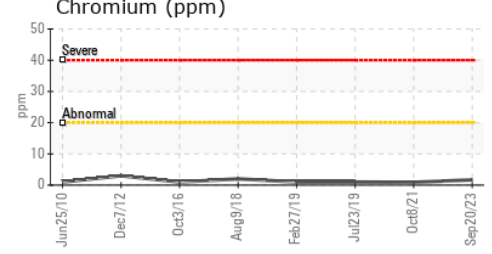
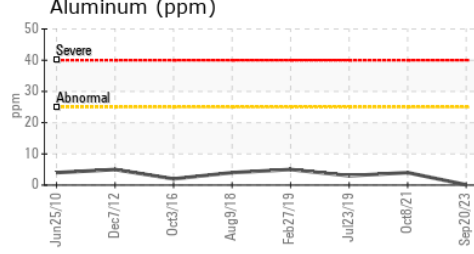
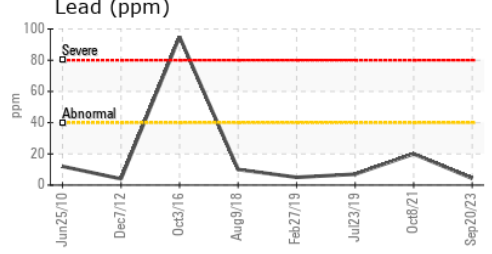
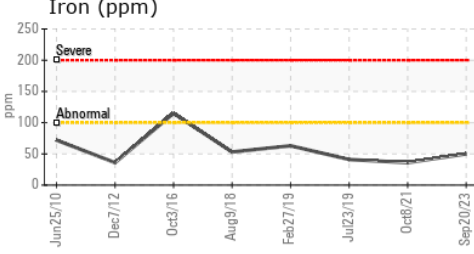
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	▲ 11.5 ● 11

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086485 **Received** : 02 Oct 2023
Lab Number : 05965877 **Diagnosed** : 04 Oct 2023
Unique Number : 10672428 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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

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)