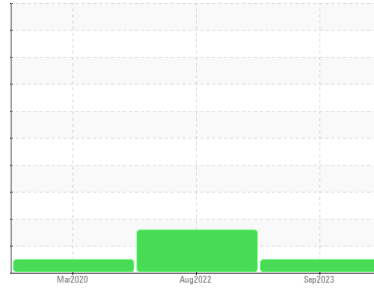


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
G.LOPES CONSTRUCTION INC./On-Road
 Machine Id
PU292
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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			PCA0098549	PCA0078336	PCA04423040
Sample Date	Client Info			05 Sep 2023	17 Aug 2022	26 Mar 2020
Machine Age	hrs	Client Info		35000	26263	7000
Oil Age	hrs	Client Info		26263	26263	---
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	52	▲ 116	13
Chromium	ppm	ASTM D5185m	>20	2	4	1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	<1	1	1
Aluminum	ppm	ASTM D5185m	>25	8	15	4
Lead	ppm	ASTM D5185m	>40	3	5	0
Copper	ppm	ASTM D5185m	>330	40	▲ 276	1
Tin	ppm	ASTM D5185m	>15	1	2	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	---

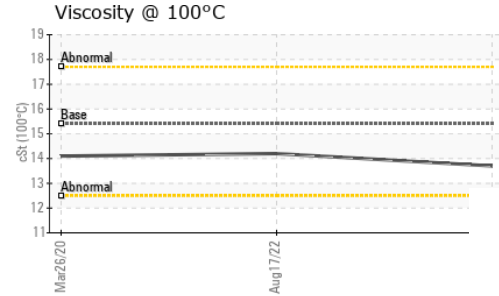
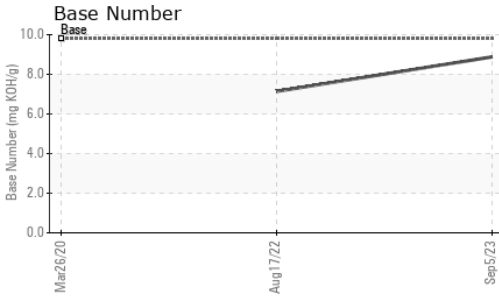
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	27	3
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	60	61	36	4
Manganese	ppm	ASTM D5185m	0	<1	2	---
Magnesium	ppm	ASTM D5185m	1010	934	569	53
Calcium	ppm	ASTM D5185m	1070	1185	1551	1733
Phosphorus	ppm	ASTM D5185m	1150	1001	780	811
Zinc	ppm	ASTM D5185m	1270	1254	915	806
Sulfur	ppm	ASTM D5185m	2060	2980	2342	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	11	3
Sodium	ppm	ASTM D5185m		2	4	5
Potassium	ppm	ASTM D5185m	>20	1	0	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.25
Nitration	Abs/cm	*ASTM D7624	>20	9.4	12.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	24.3	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	23.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.88	7.14	---

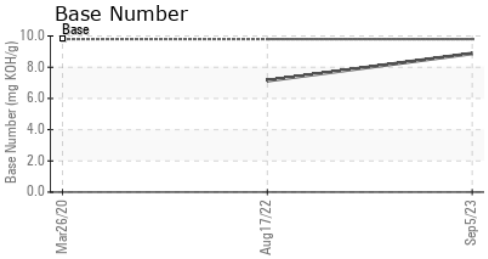
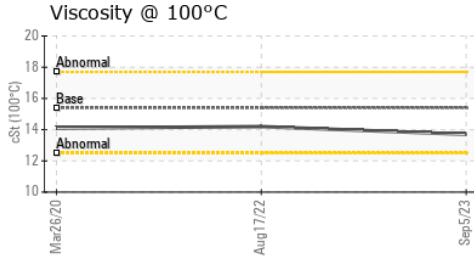
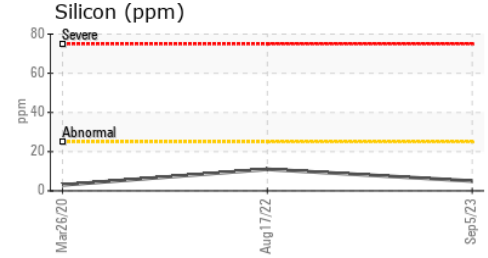
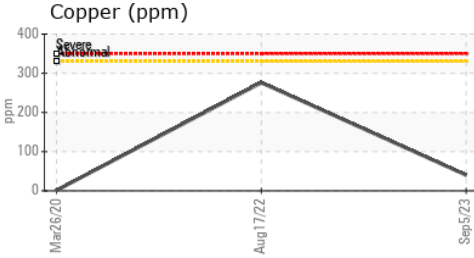
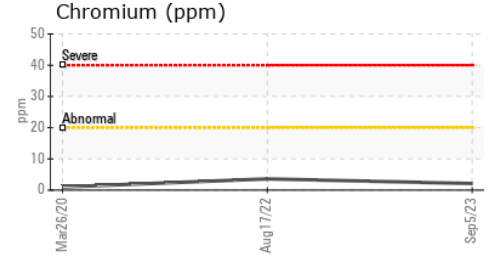
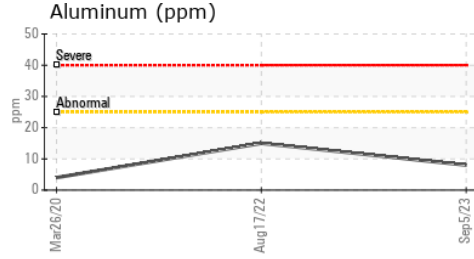
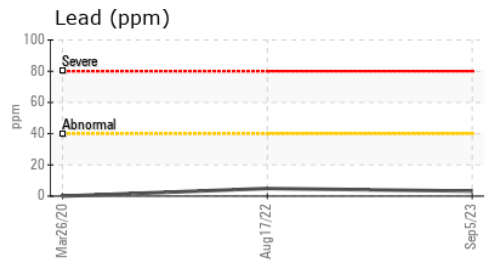
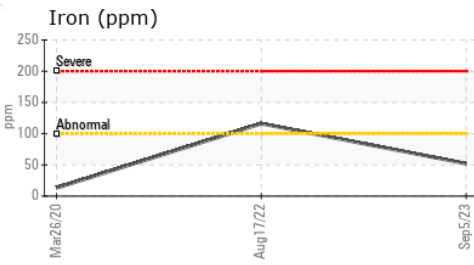
OIL ANALYSIS REPORT



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	13.7	14.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098549 **Received** : 07 Sep 2023
Lab Number : 05944761 **Diagnosed** : 08 Sep 2023
Unique Number : 10635373 **Diagnostician** : Wes Davis
Test Package : MOB 2

G LOPES CONSTRUCTION
 565 WINTHROP ST
 TAUNTON, MA
 US 02780
 Contact: BUTCH MCGRATH
 bmcgrath@glopes.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)