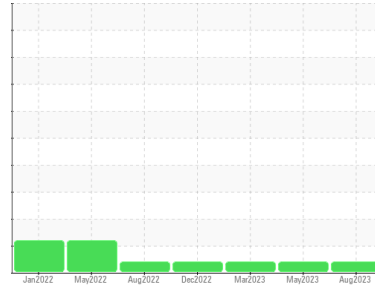


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
G.LOPES CONSTRUCTION INC./ON-ROAD
 Machine Id
PU298
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0098579	PCA0083261	PCA0072077
Sample Date	Client Info		07 Aug 2023	24 May 2023	22 Mar 2023
Machine Age	hrs	Client Info	62600	57000	53000
Oil Age	hrs	Client Info	62600	57000	53000
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	ATTENTION

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	14	15	21
Chromium	ppm	ASTM D5185m >20	2	2	2
Nickel	ppm	ASTM D5185m >4	<1	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	<1	<1	0
Aluminum	ppm	ASTM D5185m >20	3	3	4
Lead	ppm	ASTM D5185m >40	3	0	<1
Copper	ppm	ASTM D5185m >330	4	0	<1
Tin	ppm	ASTM D5185m >15	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	12	36	1
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	79	82	56
Manganese	ppm	ASTM D5185m 0	2	<1	<1
Magnesium	ppm	ASTM D5185m 1010	210	140	871
Calcium	ppm	ASTM D5185m 1070	1736	1981	1054
Phosphorus	ppm	ASTM D5185m 1150	910	984	963
Zinc	ppm	ASTM D5185m 1270	1102	1192	1164
Sulfur	ppm	ASTM D5185m 2060	4025	4198	2856

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	7	7	6
Sodium	ppm	ASTM D5185m	7	2	0
Potassium	ppm	ASTM D5185m >20	3	2	1

INFRA-RED

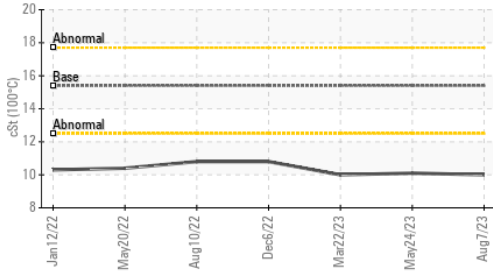
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	10.6	10.7	9.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.0	21.0	19.3

FLUID DEGRADATION

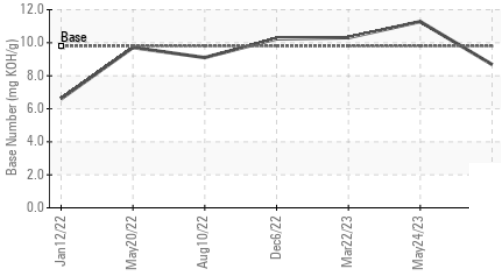
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.6	18.5	16.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.68	11.28	10.31

OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



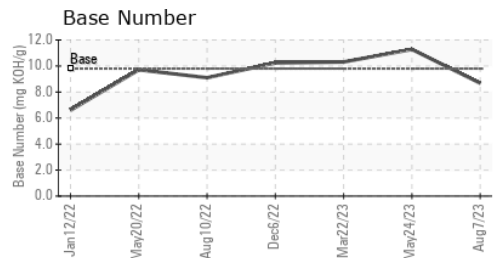
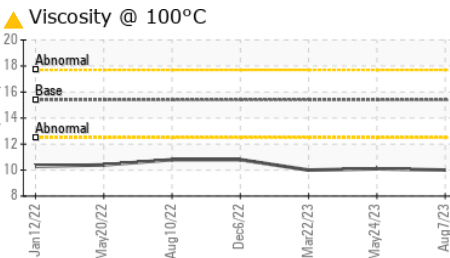
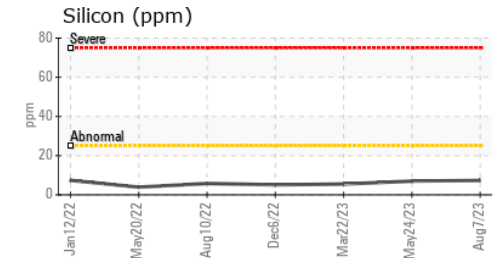
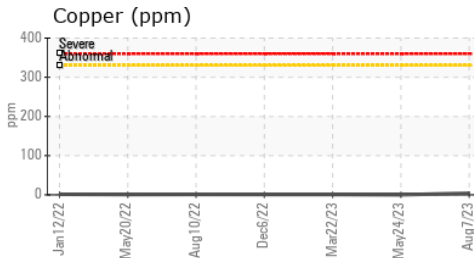
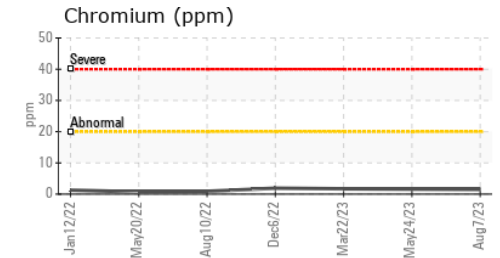
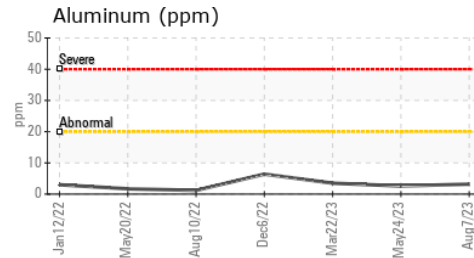
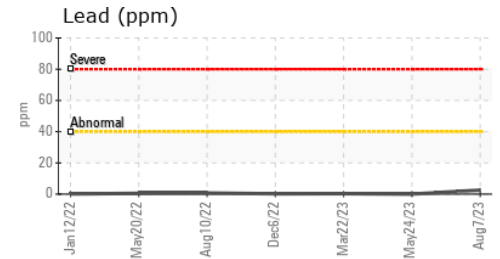
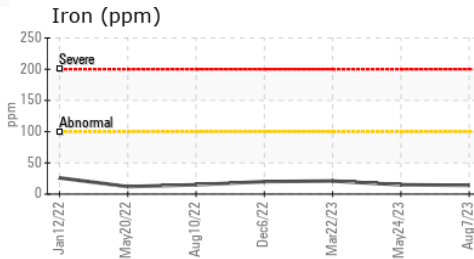
Base Number



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	15.4 ▲ 10.0	▲ 10.1	▲ 10.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098579 **Received** : 10 Aug 2023
Lab Number : 05920799 **Diagnosed** : 11 Aug 2023
Unique Number : 10592713 **Diagnostician** : Sean Felton
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)

T:
F: