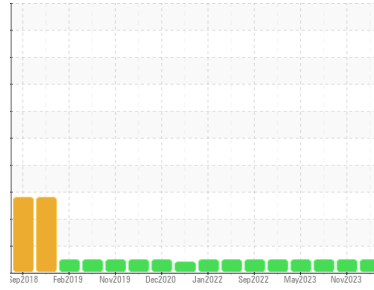


OIL ANALYSIS REPORT



Area
G.LOPES CONSTRUCTION INC./Off-Road
 Machine Id
E60
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

Sample Rating Trend



NORMAL

✓

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		PCA0122467	PCA0109811	PCA0104748
Sample Date	Client Info		02 Jul 2024	07 Nov 2023	20 Sep 2023
Machine Age	hrs Client Info		12537	12277	12200
Oil Age	hrs Client Info		10219	10036	10298
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	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	8	6	28
Chromium	ppm ASTM D5185m	>20	<1	<1	<1
Nickel	ppm ASTM D5185m	>2	<1	0	0
Titanium	ppm ASTM D5185m	>2	<1	<1	<1
Silver	ppm ASTM D5185m	>2	<1	0	0
Aluminum	ppm ASTM D5185m	>25	2	<1	1
Lead	ppm ASTM D5185m	>40	<1	0	<1
Copper	ppm ASTM D5185m	>330	3	1	3
Tin	ppm ASTM D5185m	>15	<1	0	<1
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	29	13	54
Barium	ppm ASTM D5185m	0	0	2	0
Molybdenum	ppm ASTM D5185m	60	64	59	67
Manganese	ppm ASTM D5185m	0	<1	<1	0
Magnesium	ppm ASTM D5185m	1010	928	854	952
Calcium	ppm ASTM D5185m	1070	1157	950	1299
Phosphorus	ppm ASTM D5185m	1150	998	994	1036
Zinc	ppm ASTM D5185m	1270	1265	1191	1364
Sulfur	ppm ASTM D5185m	2060	3093	2820	3538

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	4	4	9
Sodium	ppm ASTM D5185m		0	<1	3
Potassium	ppm ASTM D5185m	>20	2	<1	2

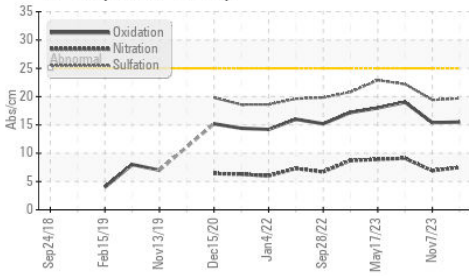
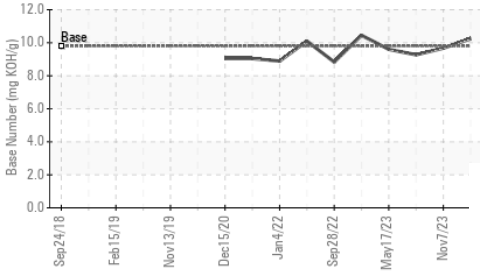
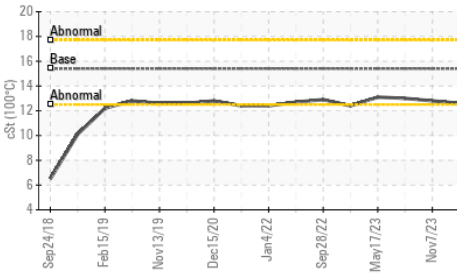
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3	0.3	0.3	0.9
Nitration	Abs/cm *ASTM D7624	>20	7.5	6.9	9.1
Sulfation	Abs/.1mm *ASTM D7415	>30	19.7	19.4	22.2

FLUID DEGRADATION

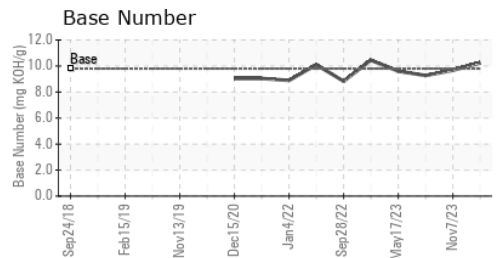
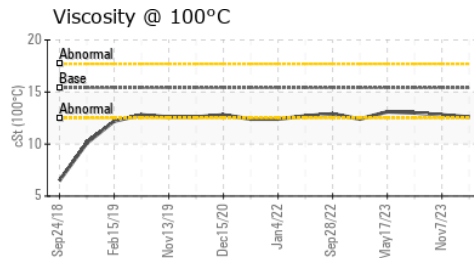
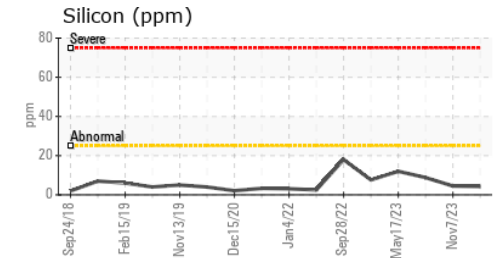
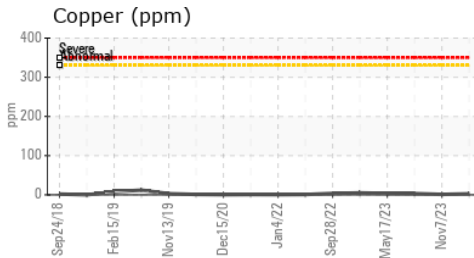
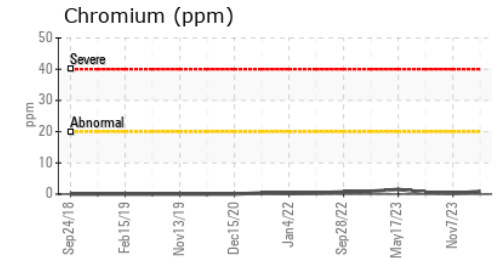
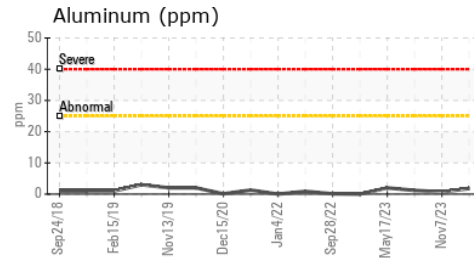
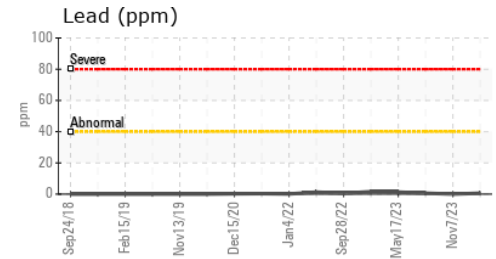
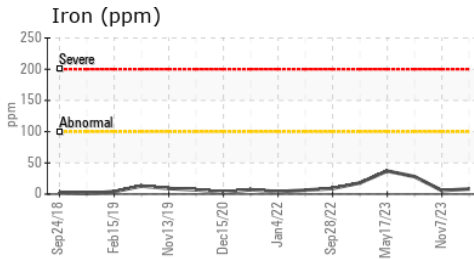
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	15.5	15.4	19.0
Base Number (BN)	mg KOH/g ASTM D2896	9.8	10.24	9.67	9.27

OIL ANALYSIS REPORT

FT-IR (Direct Trend)

Base Number

Viscosity @ 100°C


PARAMETER	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	12.6	12.8

GRAPHS


Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122467 **Received** : 08 Jul 2024
Lab Number : 06230394 **Tested** : 09 Jul 2024
Unique Number : 11113887 **Diagnosed** : 09 Jul 2024 - 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)