

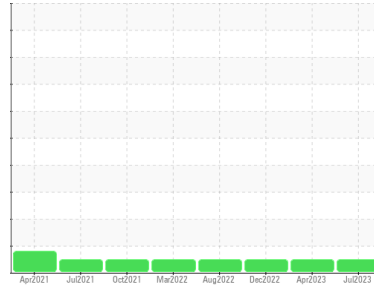
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
G.LOPES CONSTRUCTION INC./On-Road
 Machine Id
344
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (10 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	history 1	history 2	
Sample Number	Client Info	PCA0090746	PCA0083067	PCA0083319	
Sample Date	Client Info	03 Jul 2023	05 Apr 2023	06 Dec 2022	
Machine Age	mls	Client Info	172000	152000	132000
Oil Age	mls	Client Info	72000	54000	72000
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		NORMAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >3.0	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >200	15	18	17
Chromium	ppm	ASTM D5185m >6	1	1	2
Nickel	ppm	ASTM D5185m >3	0	0	<1
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >50	4	7	9
Lead	ppm	ASTM D5185m >10	<1	0	<1
Copper	ppm	ASTM D5185m >50	8	9	10
Tin	ppm	ASTM D5185m >6	<1	<1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 0	2	<1	3
Barium	ppm	ASTM D5185m 0	2	0	0
Molybdenum	ppm	ASTM D5185m 60	64	58	60
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 1010	948	916	1013
Calcium	ppm	ASTM D5185m 1070	1137	1052	1178
Phosphorus	ppm	ASTM D5185m 1150	1025	938	1011
Zinc	ppm	ASTM D5185m 1270	1256	1159	1312
Sulfur	ppm	ASTM D5185m 2060	3045	2677	3176

CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >50	5	6	5
Sodium	ppm	ASTM D5185m	0	3	<1
Potassium	ppm	ASTM D5185m >20	6	7	14

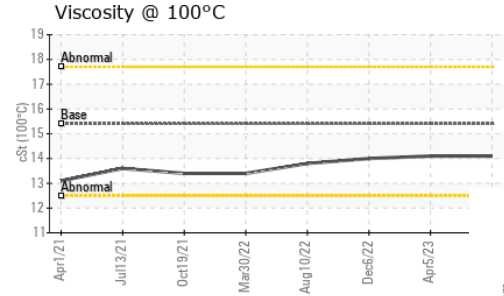
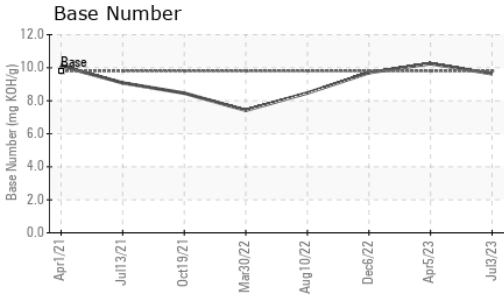
INFRA-RED

method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844 >3	0.5	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	8.6	9.1	9.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.9	20.6	21.7

FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.6	16.5	17.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	9.63	10.25	9.70

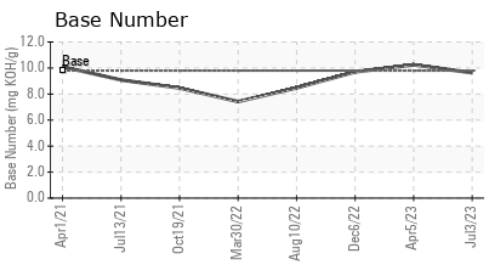
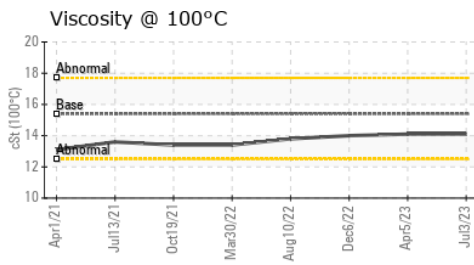
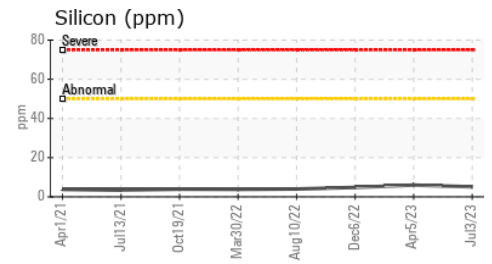
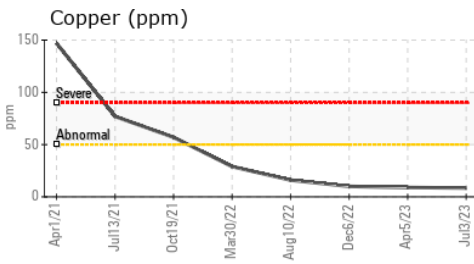
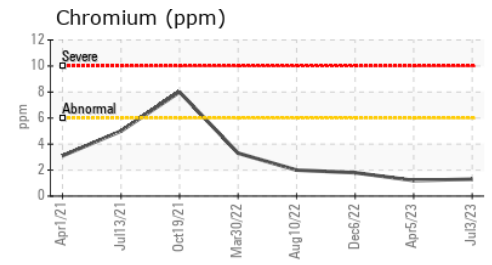
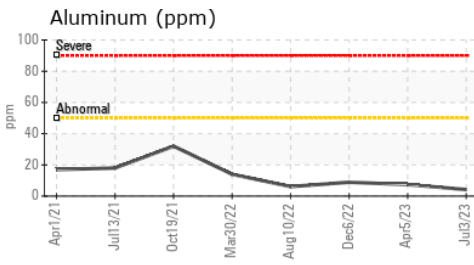
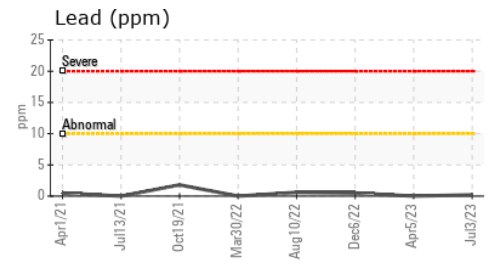
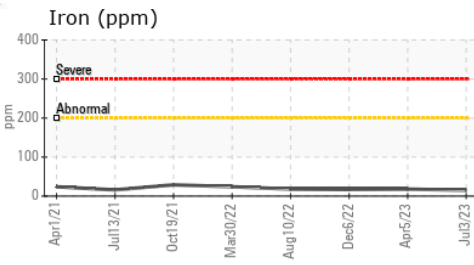
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.1	14.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0090746 **Received** : 06 Jul 2023
Lab Number : 05891484 **Diagnosed** : 07 Jul 2023
Unique Number : 10547294 **Diagnostician** : Wes Davis
Test Package : MOB 2

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 Contact: BUTCH MCGRATH
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 F:

Certificate L2367
 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)