

Area
G. LOPES CONSTRUCTION INC./ON-ROAD

Machine Id

365

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0123021	PCA0122735	PCA0109768
Sample Date		Client Info		02 Jul 2024	15 May 2024	15 Nov 2023
Machine Age	hrs	Client Info		121000	121000	121000
Oil Age	hrs	Client Info		121000	121000	121000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	10	17
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	1
Lead	ppm	ASTM D5185m	>40	7	3	2
Copper	ppm	ASTM D5185m	>330	10	7	5
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

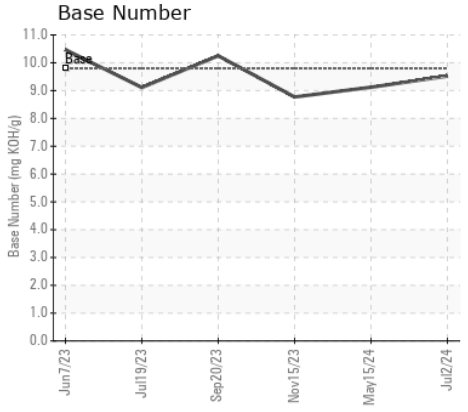
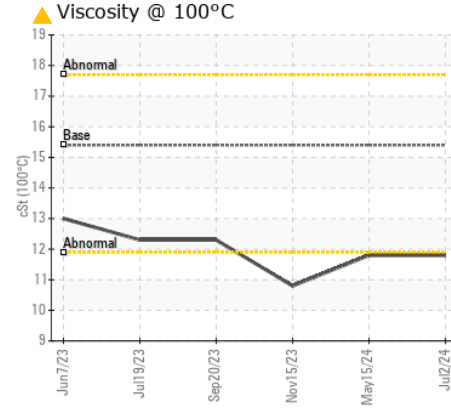
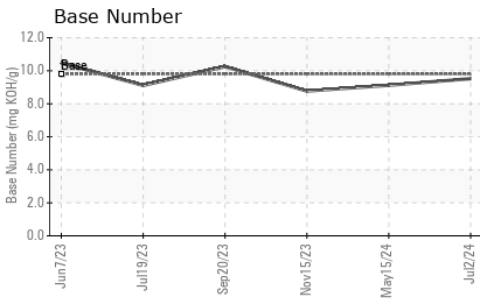
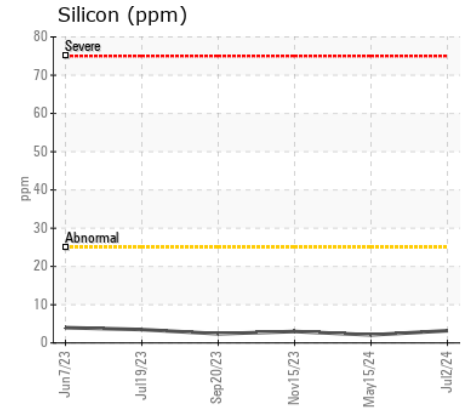
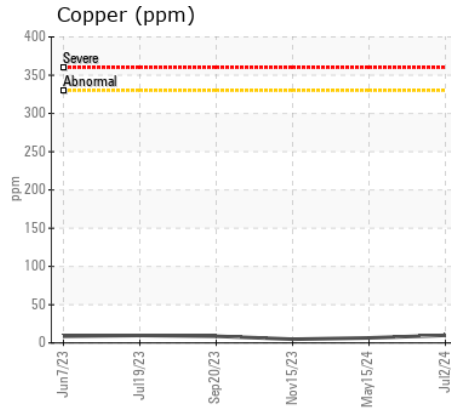
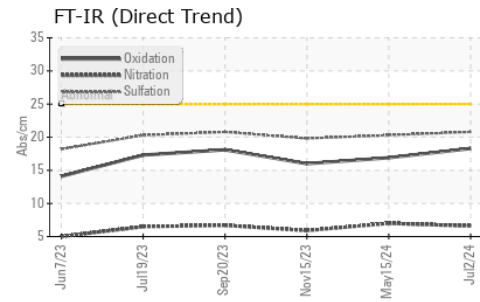
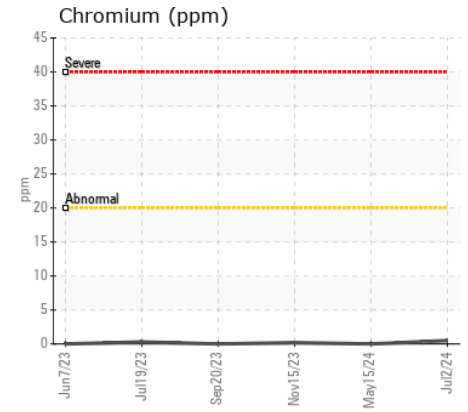
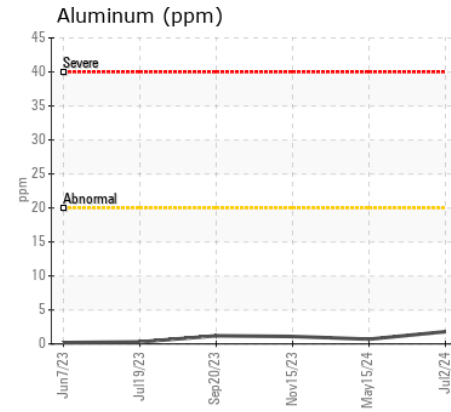
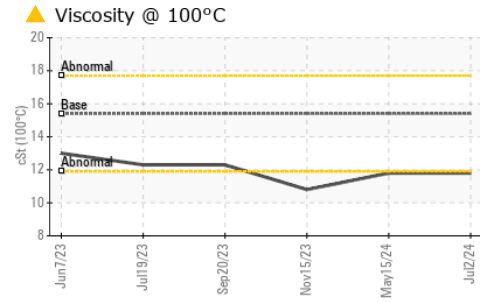
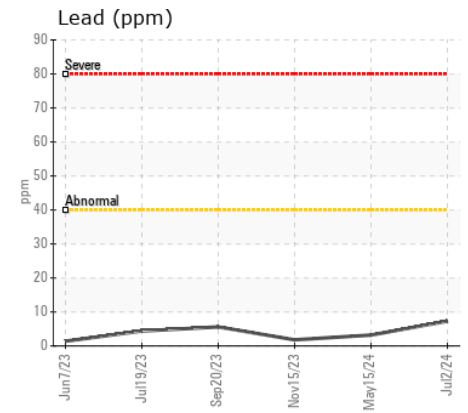
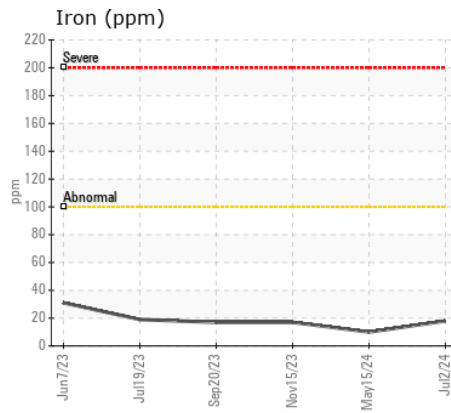
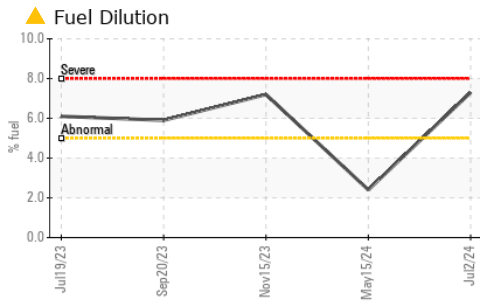
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	3	2	3
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel	%	ASTM D3524	>5	▲ 7.3	▲ 2.4	▲ 7.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.6	7.0	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	20.3	19.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity.

Sodium	ppm	ASTM D5185m		0	<1	0
Boron	ppm	ASTM D5185m	0	3	5	17
Barium	ppm	ASTM D5185m	0	0	0	<1
Molybdenum	ppm	ASTM D5185m	60	53	55	47
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	848	873	702
Calcium	ppm	ASTM D5185m	1070	1058	1037	1230
Phosphorus	ppm	ASTM D5185m	1150	898	984	934
Zinc	ppm	ASTM D5185m	1270	1145	1153	1105
Sulfur	ppm	ASTM D5185m	2060	2822	3060	2602
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	16.9	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.52	9.12	8.77
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.8	▲ 11.8	▲ 10.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0123021 **Received** : 08 Jul 2024
Lab Number : 06230393 **Tested** : 12 Jul 2024
Unique Number : 11113886 **Diagnosed** : 12 Jul 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: FUELDILUTION, PercentFuel)

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)

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