

Area
G. LOPES CONSTRUCTION INC./ON-ROAD

Machine Id
PU248

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0123018	PCA0122627	PCA0109696
Sample Date		Client Info		02 Jul 2024	08 May 2024	19 Mar 2024
Machine Age	hrs	Client Info		148000	146000	144000
Oil Age	hrs	Client Info		148000	146000	144000
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				NORMAL	MARGINAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	14	16	29
Chromium	ppm	ASTM D5185m	>20	2	1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	5
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	2	1	3
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

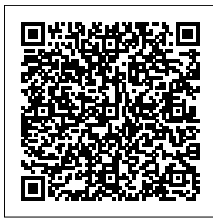
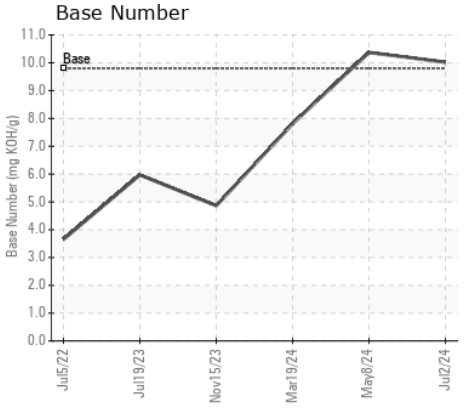
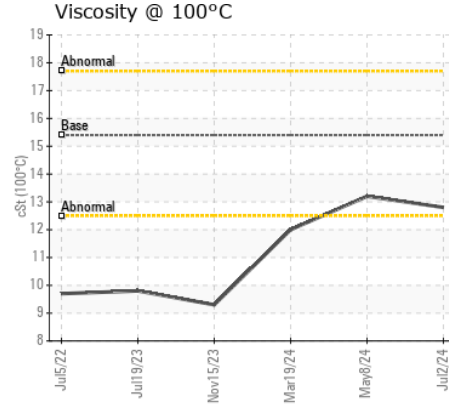
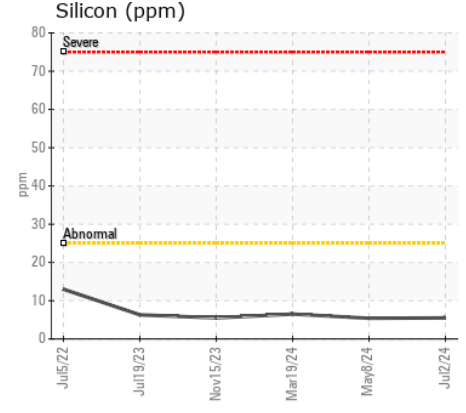
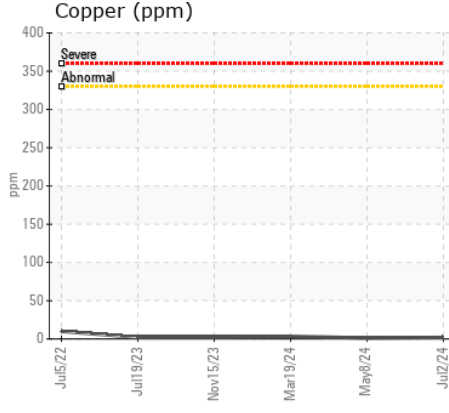
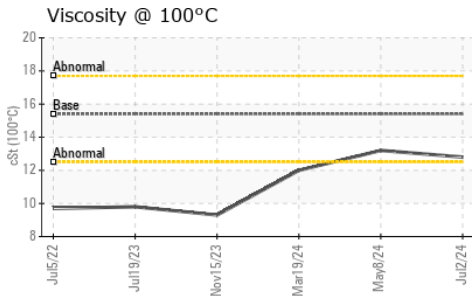
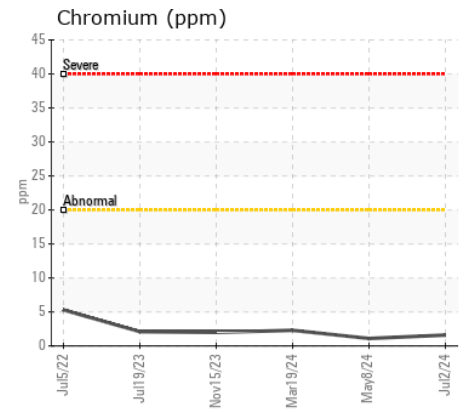
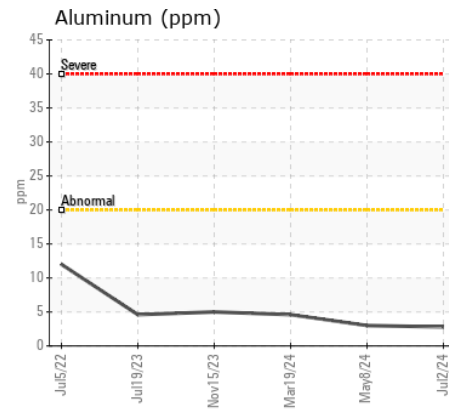
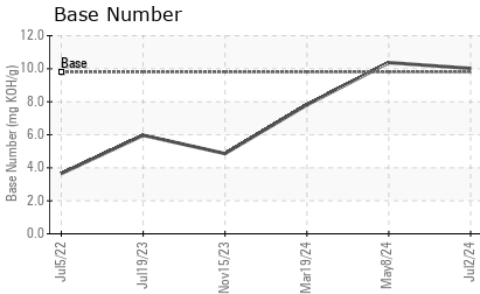
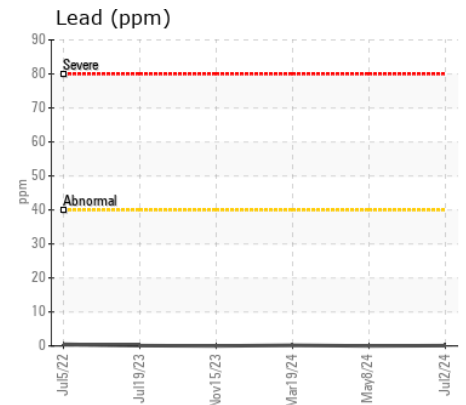
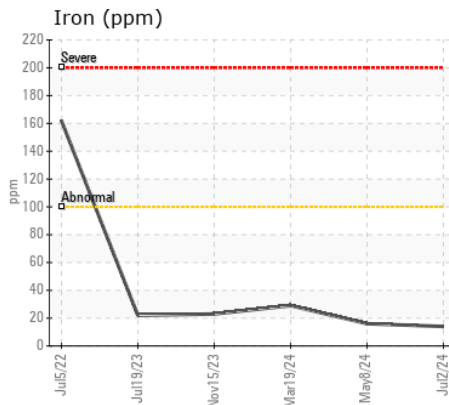
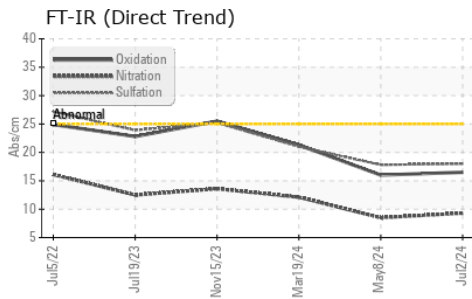
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	6
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Fuel		WC Method	>5	<1.0	▲ 2.4	▲ 5.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.5	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.8	21.0
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	2	2
Boron	ppm	ASTM D5185m	0	4	7	12
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	56	61	66
Manganese	ppm	ASTM D5185m	0	<1	<1	1
Magnesium	ppm	ASTM D5185m	1010	873	993	815
Calcium	ppm	ASTM D5185m	1070	1097	1188	1205
Phosphorus	ppm	ASTM D5185m	1150	927	1108	1053
Zinc	ppm	ASTM D5185m	1270	1184	1343	1203
Sulfur	ppm	ASTM D5185m	2060	2888	3799	3302
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	16.0	21.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	10.02	10.37	7.81
Visc @ 100°C	cSt	ASTM D445	15.4	12.8	13.2	▲ 12.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0123018 **Received** : 08 Jul 2024
Lab Number : 06230392 **Tested** : 09 Jul 2024
Unique Number : 11113885 **Diagnosed** : 09 Jul 2024 - Wes Davis
Test Package : MOB 2

G LOPES CONSTRUCTION
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 US 02780
 Contact: BUTCH MCGRATH
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 T:
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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)