



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
PS21
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0122688	PCA0066500	PCA0018648
Sample Date		Client Info		23 Apr 2024	13 Jul 2022	15 Dec 2020
Machine Age	hrs	Client Info		3786	3558	3383
Oil Age	hrs	Client Info		3611	175	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	10	19
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	12	3
Aluminum	ppm	ASTM D5185m	>25	2	2	4
Lead	ppm	ASTM D5185m	>40	<1	1	2
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

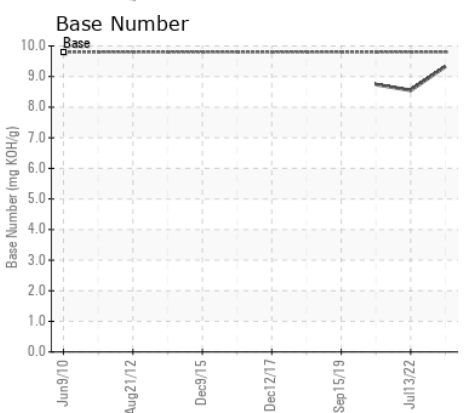
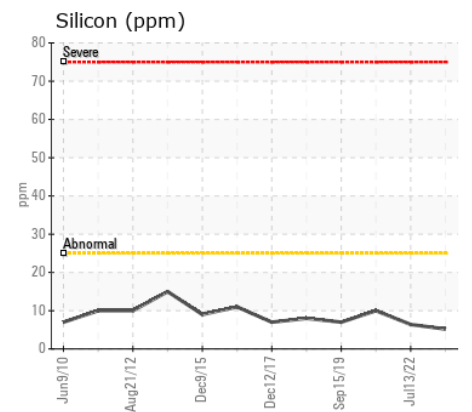
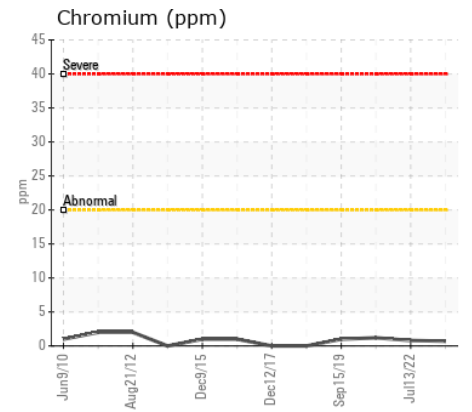
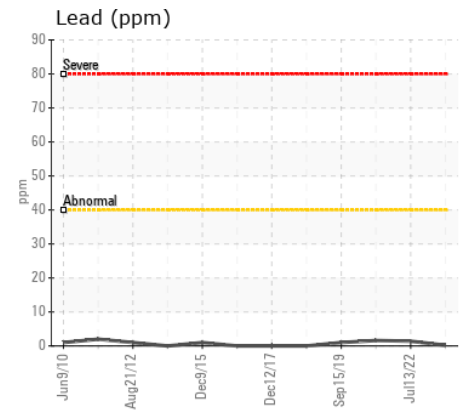
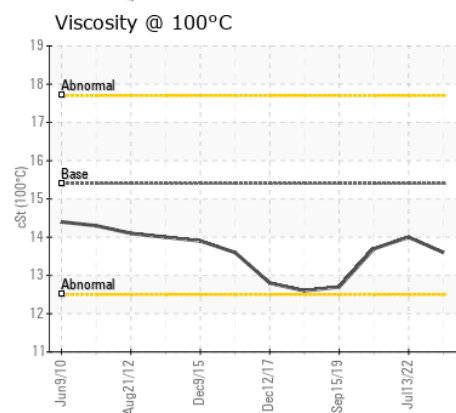
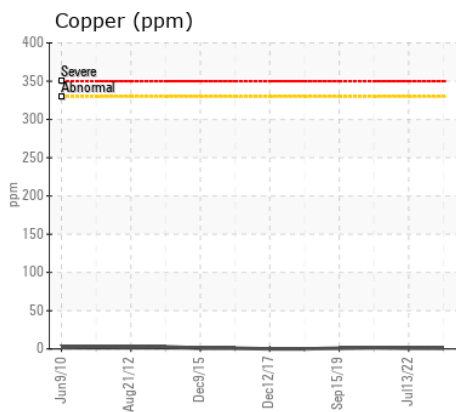
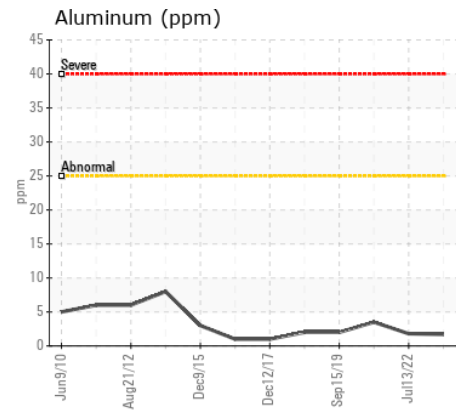
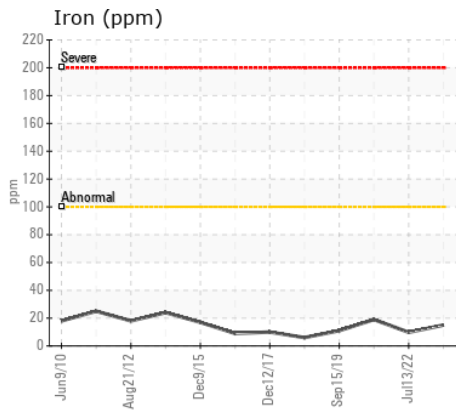
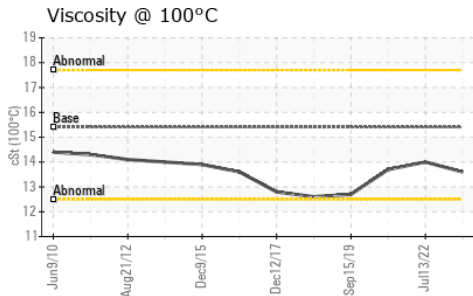
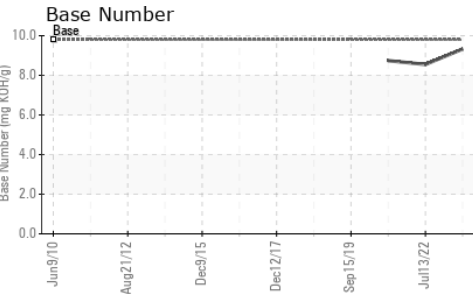
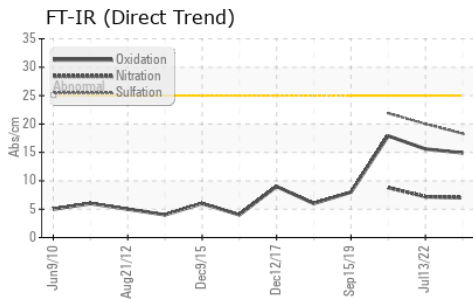
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	10
Potassium	ppm	ASTM D5185m	>20	0	0	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.0	7.2	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	20.0	21.9
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		3	<1	5
Boron	ppm	ASTM D5185m	0	9	25	60
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	59	55	26
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	973	901	707
Calcium	ppm	ASTM D5185m	1070	1198	1287	1805
Phosphorus	ppm	ASTM D5185m	1150	1052	986	853
Zinc	ppm	ASTM D5185m	1270	1223	1186	1089
Sulfur	ppm	ASTM D5185m	2060	3588	3803	2812
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	15.6	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.33	8.55	8.74
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	14.0	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122688
Lab Number : 06161696
Unique Number : 10997119
Test Package : MOB 2
Received : 26 Apr 2024
Tested : 28 Apr 2024
Diagnosed : 28 Apr 2024 - Wes Davis

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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F: