



Area
G.LOPES CONSTRUCTION INC./Off-Road
Machine Id
E2703
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0122620	PCA0098425	PCA0078284
Sample Date		Client Info		08 May 2024	19 Jul 2023	06 Sep 2022
Machine Age	hrs	Client Info		1940	1425	1425
Oil Age	hrs	Client Info		637	637	1005
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				ATTENTION	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	32	44	30
Chromium	ppm	ASTM D5185m	>20	2	5	4
Nickel	ppm	ASTM D5185m	>2	0	1	0
Titanium	ppm	ASTM D5185m	>2	0	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	16	▲ 35	22
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	2	7	20
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

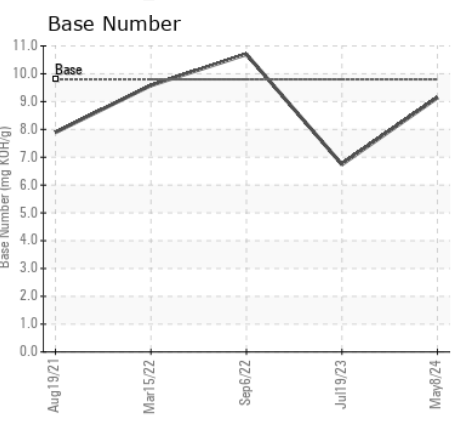
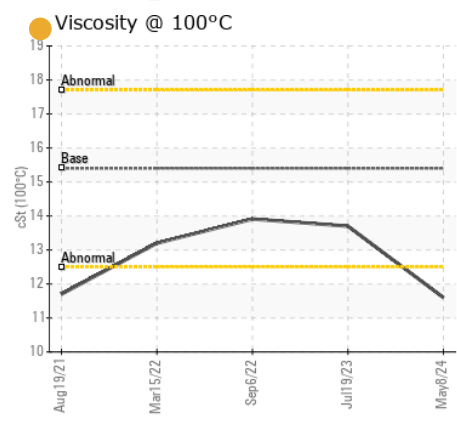
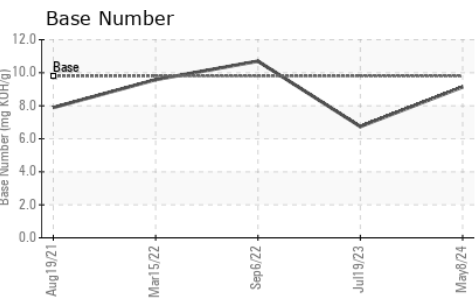
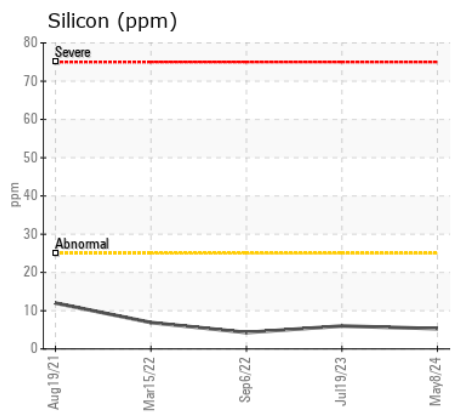
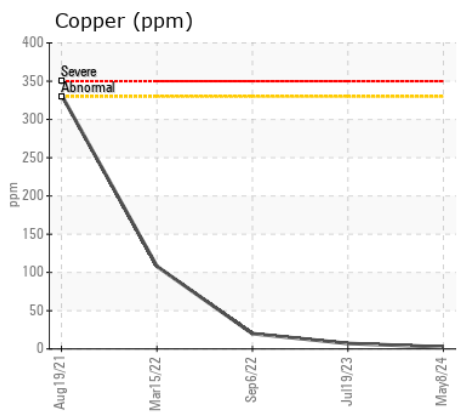
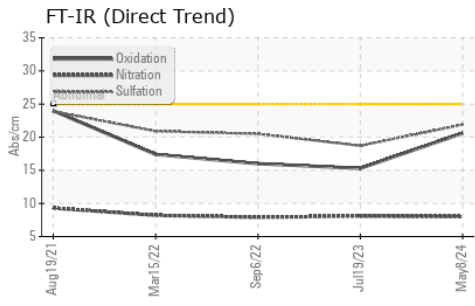
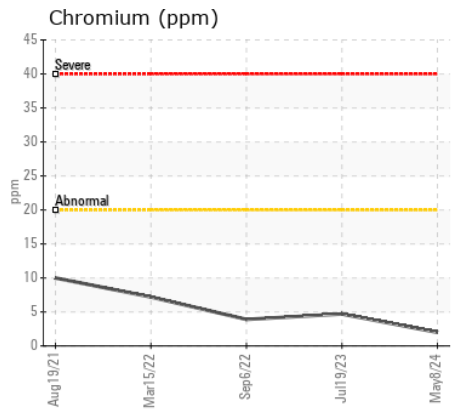
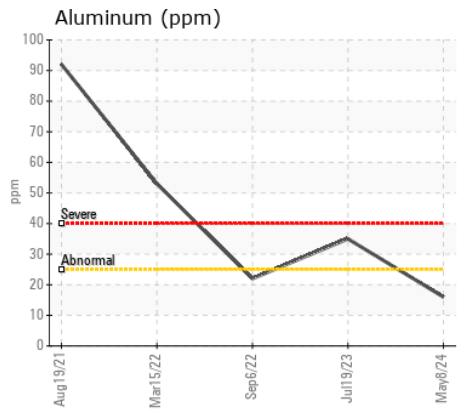
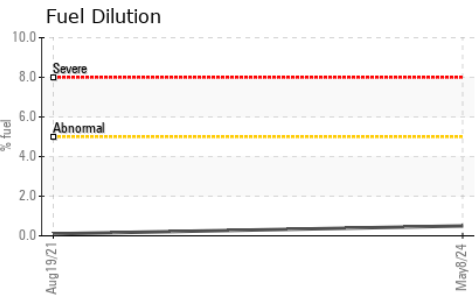
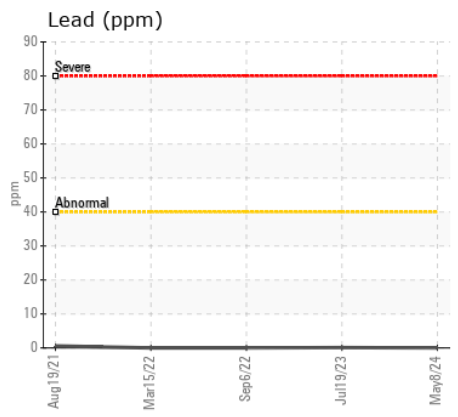
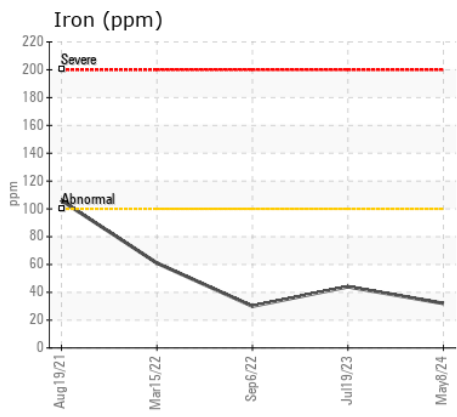
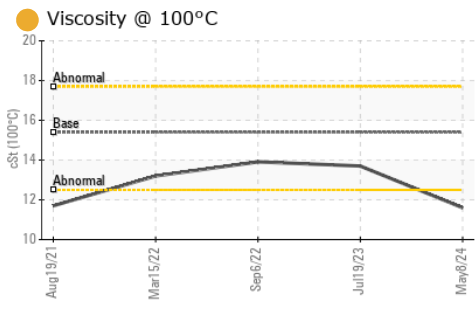
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	4
Potassium	ppm	ASTM D5185m	>20	<1	<1	2
Fuel	%	ASTM D3524	>5	0.5	<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	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.0	8.1	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	18.7	20.5
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	0	0
Boron	ppm	ASTM D5185m	0	34	1	5
Barium	ppm	ASTM D5185m	0	<1	2	0
Molybdenum	ppm	ASTM D5185m	60	42	63	64
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	546	954	931
Calcium	ppm	ASTM D5185m	1070	1569	1168	1148
Phosphorus	ppm	ASTM D5185m	1150	905	1019	1035
Zinc	ppm	ASTM D5185m	1270	1082	1243	1264
Sulfur	ppm	ASTM D5185m	2060	3009	3144	3035
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	15.3	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.14	6.74	10.7
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.6	13.7	13.91



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0122620 **Received** : 10 May 2024
Lab Number : 06175704 **Tested** : 15 May 2024
Unique Number : 11021757 **Diagnosed** : 15 May 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)