



LUBE PLUS+

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Charlestown

Machine Id

607

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0001936	PCA0059559	PCA0059559
Sample Date		Client Info		02 Jul 2024	19 Apr 2022	19 Apr 2022
Machine Age	mls	Client Info		0	473576	284356
Oil Age	mls	Client Info		0	18000	18000
Filter Age	mls	Client Info		0	18000	18000
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	13	40	17
Chromium	ppm	ASTM D5185m	>20	2	3	1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	8	22	5
Lead	ppm	ASTM D5185m	>30	0	<1	<1
Copper	ppm	ASTM D5185m	>30	4	5	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

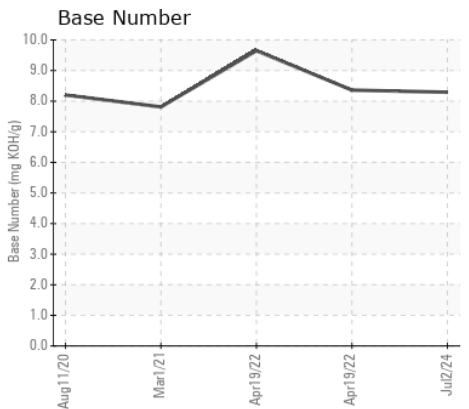
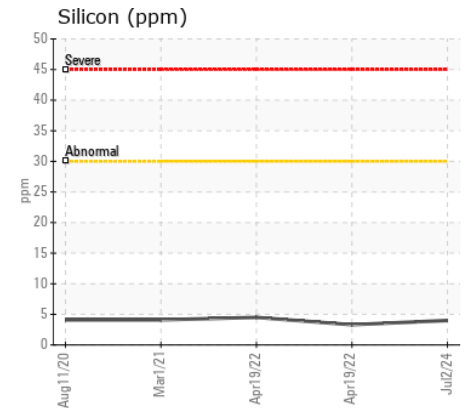
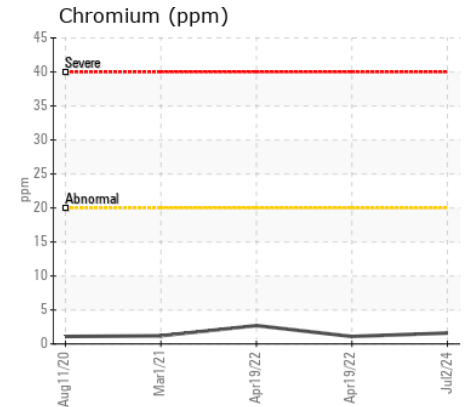
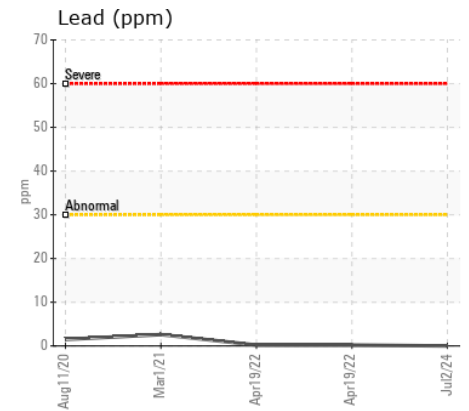
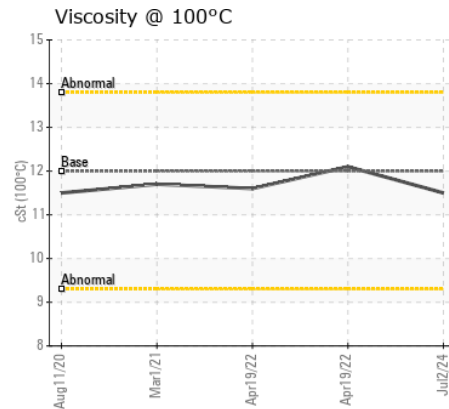
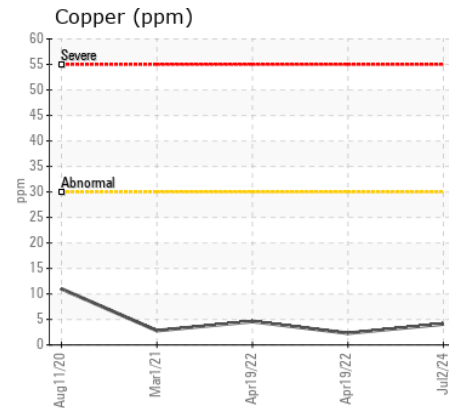
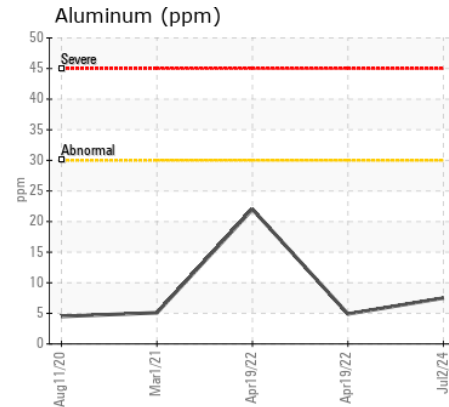
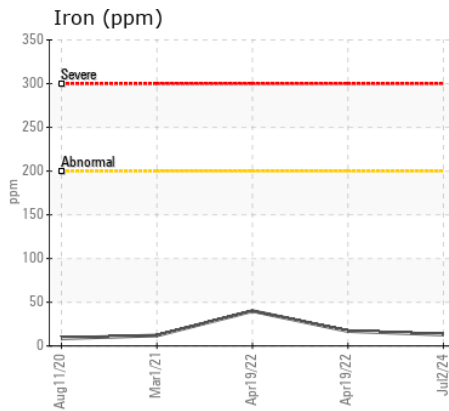
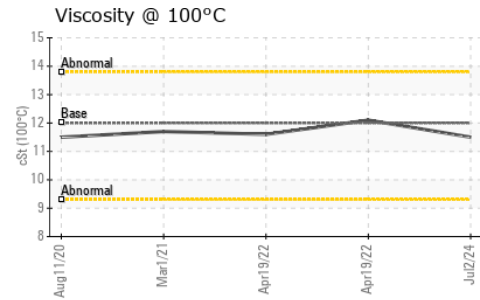
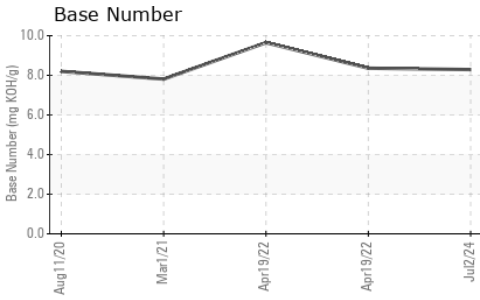
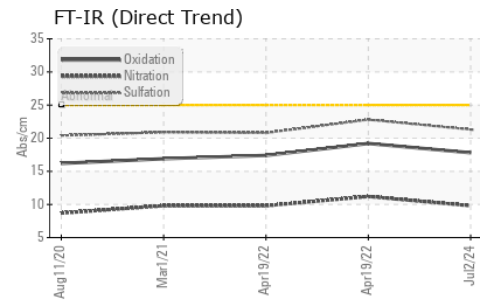
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	4	4	3
Potassium	ppm	ASTM D5185m	>20	6	3	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	1.1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.8	11.2	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	22.8	20.8
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	0	<1
Boron	ppm	ASTM D5185m	2	5	6	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	61	68	67
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	950	969	941	939
Calcium	ppm	ASTM D5185m	1050	1084	1163	1141
Phosphorus	ppm	ASTM D5185m	995	991	1085	1062
Zinc	ppm	ASTM D5185m	1180	1264	1303	1290
Sulfur	ppm	ASTM D5185m	2600	2688	2969	3057
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	19.2	17.4
Base Number (BN)	mg KOH/g	ASTM D2896		8.29	8.36	9.65
Visc @ 100°C	cSt	ASTM D445	12.00	11.5	12.1	11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001936
Lab Number : 06230903
Unique Number : 11114396
Test Package : MOB 2

Received : 08 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Wes Davis

PORTSIDE TRUCK AND AUTO - DIVERSIFIED AUTO
 100 TERMINAL ST
 CHARLESTOWN, MA
 US 02129

Contact: BRYAN WINTER
 BWINTERS@DIVERSIFIEDAUTO.COM

T: 1(857)998-2229

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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