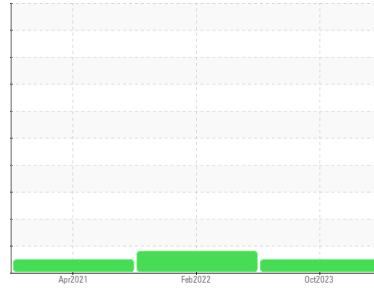


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Charlestown
Machine Id
537
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0078375	WC0594413	PCA0023285
Sample Date	Client Info			24 Oct 2023	25 Feb 2022	13 Apr 2021
Machine Age	mls	Client Info		0	0	345991
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	36	80	34
Chromium	ppm	ASTM D5185m	>20	3	8	6
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	1	<1	0
Aluminum	ppm	ASTM D5185m	>30	17	▲ 59	27
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>30	7	13	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

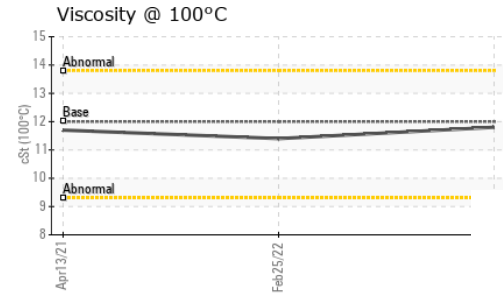
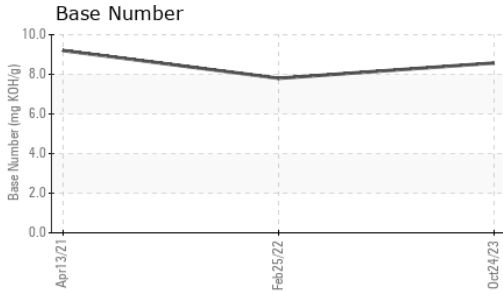
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	1	11	4
Barium	ppm	ASTM D5185m	0	3	0	0
Molybdenum	ppm	ASTM D5185m	50	62	63	64
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	950	937	1001	942
Calcium	ppm	ASTM D5185m	1050	1090	1146	1062
Phosphorus	ppm	ASTM D5185m	995	1049	1058	1012
Zinc	ppm	ASTM D5185m	1180	1231	1353	1224
Sulfur	ppm	ASTM D5185m	2600	3128	2784	2528

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>30	11	7	4
Sodium	ppm	ASTM D5185m		1	2	3
Potassium	ppm	ASTM D5185m	>20	3	31	19

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.9	1	1
Nitration	Abs/cm	*ASTM D7624	>20	10.2	9.7	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	19.6	20.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	14.7	15.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.57	7.80	9.20

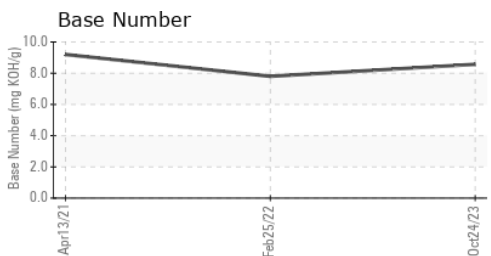
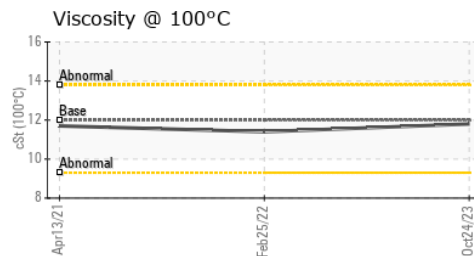
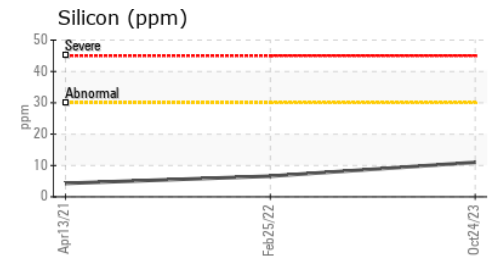
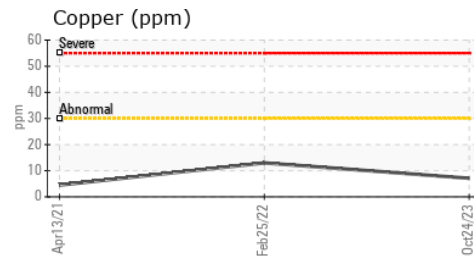
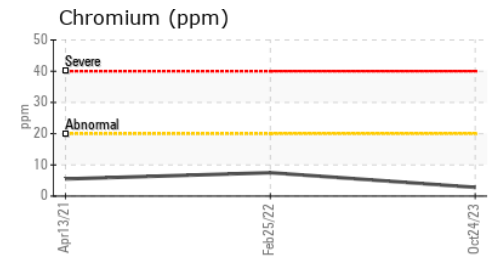
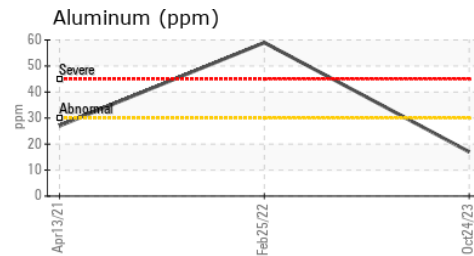
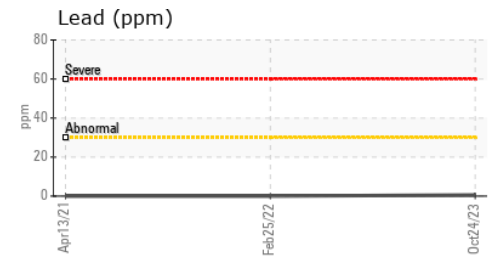
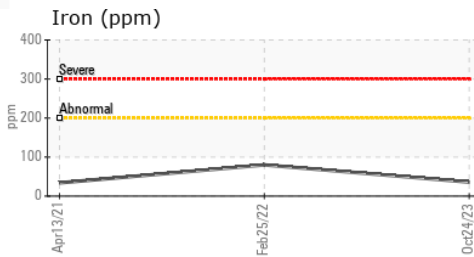
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.8	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0078375 **Recieved** : 11 Jan 2024
Lab Number : 06058840 **Diagnosed** : 15 Jan 2024
Unique Number : 10830222 **Diagnostician** : Wes Davis
Test Package : MOB 2

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 US 02129
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 BWINTERS@DIVERSIFIEDAUTO.COM
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 F:

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)