



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id

755

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0817218	WC0817213	WC0773712
Sample Date		Client Info		10 Jan 2024	18 Dec 2023	17 Oct 2023
Machine Age	mls	Client Info		322887	15705	15460
Oil Age	mls	Client Info		0	15705	0
Filter Age	mls	Client Info		0	15705	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	15	45
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	3	4
Lead	ppm	ASTM D5185m	>40	0	0	2
Copper	ppm	ASTM D5185m	>330	<1	2	15
Tin	ppm	ASTM D5185m	>15	0	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

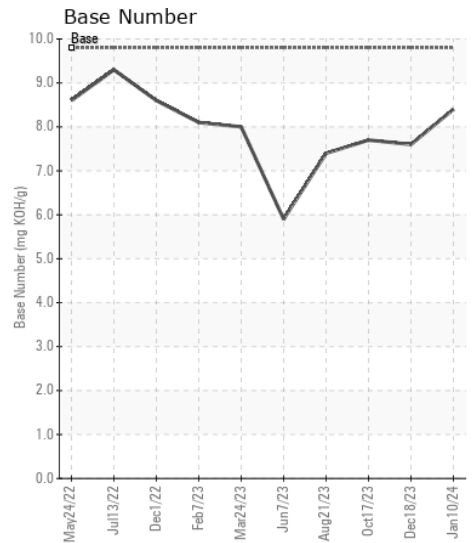
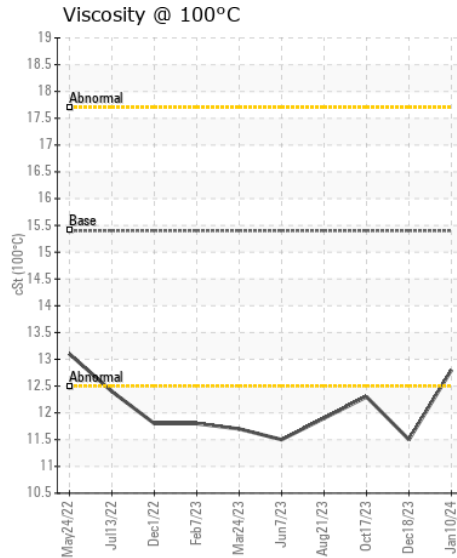
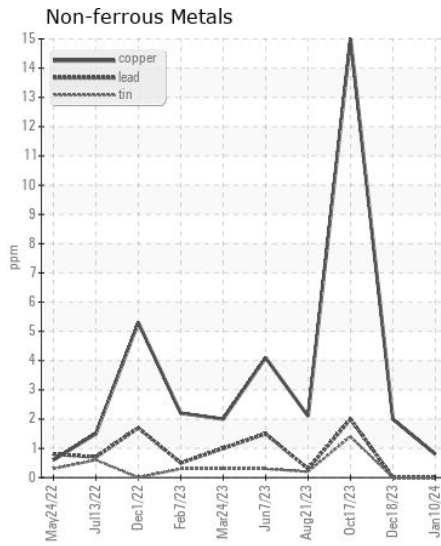
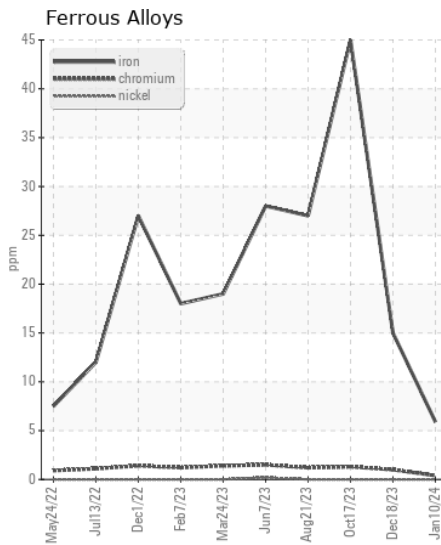
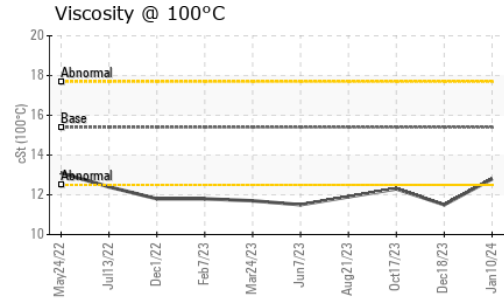
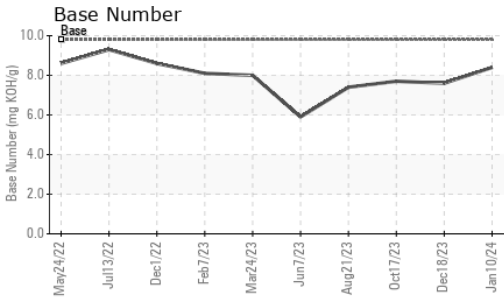
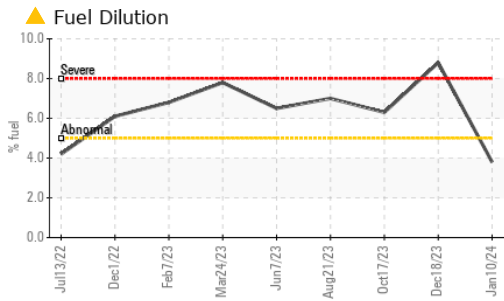
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	9
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Fuel	%	ASTM D3524	>5	3.8	8.8	6.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.4	9.5	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	22.0	20.9
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		2	15	3
Boron	ppm	ASTM D5185m	0	2	3	5
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	59	56	56
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	929	877	935
Calcium	ppm	ASTM D5185m	1070	1064	995	1050
Phosphorus	ppm	ASTM D5185m	1150	1025	1020	1026
Zinc	ppm	ASTM D5185m	1270	1222	1176	1249
Sulfur	ppm	ASTM D5185m	2060	3085	2792	3513
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	23.1	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	7.6	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	12.8	11.5	12.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0817218 **Received** : 16 Jan 2024
Lab Number : 06061803 **Diagnosed** : 18 Jan 2024
Unique Number : 10833185 **Diagnostician** : Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

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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)