



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
714
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0725891	WC0725881	WC0725821
Sample Date		Client Info		17 May 2024	13 Dec 2023	02 Mar 2023
Machine Age	mls	Client Info		324388	320563	311685
Oil Age	mls	Client Info		0	0	6000
Filter Age	mls	Client Info		0	0	6000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	21	13	19
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		3	8	17
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	5	2	2
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	10	10	48
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

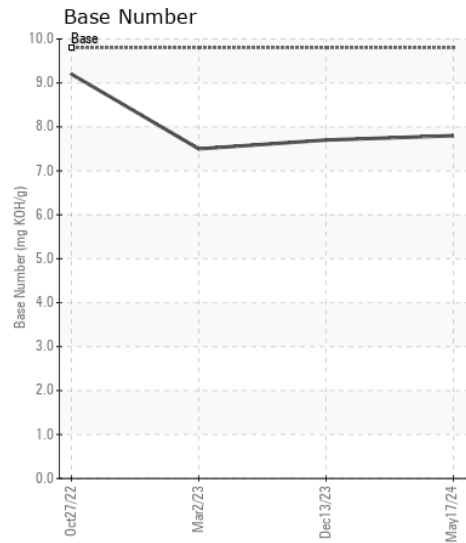
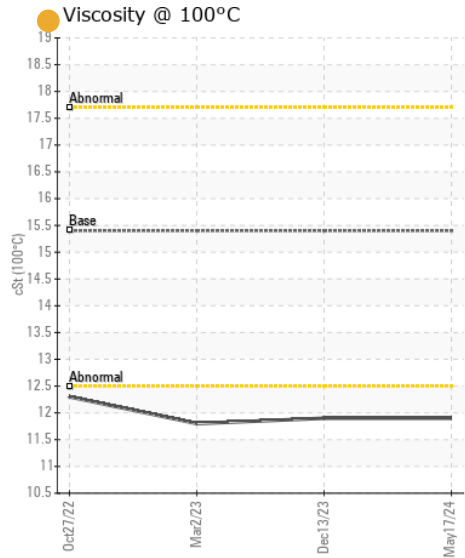
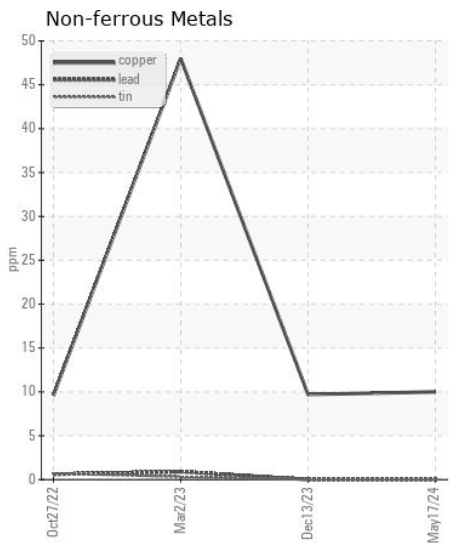
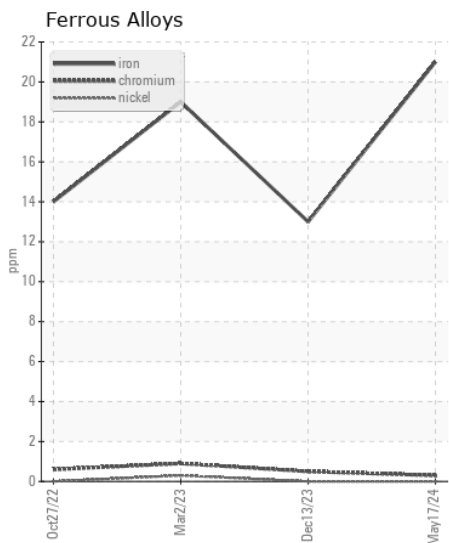
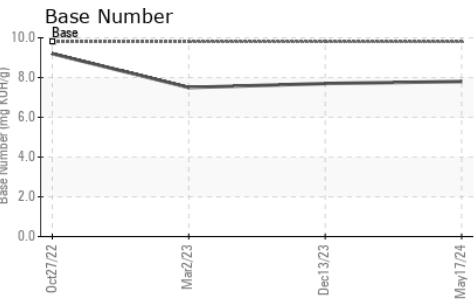
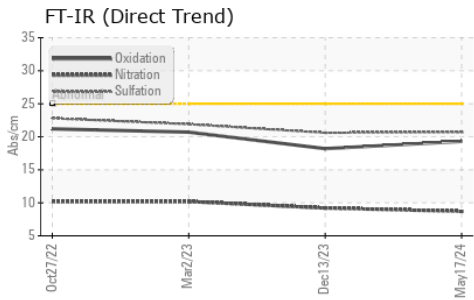
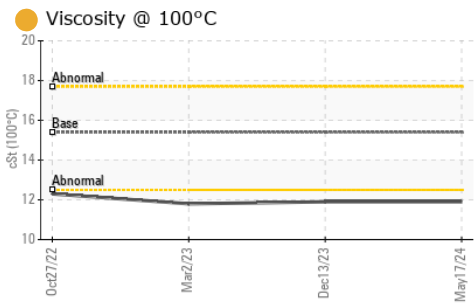
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	5	5
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Fuel		WC Method	>5	<1.0	▲ 3.4	▲ 6.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.2	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	20.6	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 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		2	2	2
Boron	ppm	ASTM D5185m	0	12	19	23
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	60	56	54	46
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	902	856	761
Calcium	ppm	ASTM D5185m	1070	1061	1092	1164
Phosphorus	ppm	ASTM D5185m	1150	1039	1028	951
Zinc	ppm	ASTM D5185m	1270	1206	1210	1140
Sulfur	ppm	ASTM D5185m	2060	3416	3045	2941
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.3	18.2	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.8	7.7	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.9	▲ 11.9	▲ 11.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0725891 **Received** : 24 May 2024
Lab Number : 06191693 **Tested** : 30 May 2024
Unique Number : 11048445 **Diagnosed** : 30 May 2024 - Sean Felton
Test Package : FLEET

AREA TRANSPORTATION AUTHORITY
 44 TRANSPORTATION CENTER
 JOHNSONBURG, PA
 US 15845
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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)