



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
4572M
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (5 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124751	GFL0097735	GFL0087262
Sample Date		Client Info		17 Jun 2024	17 Dec 2023	18 Sep 2023
Machine Age	hrs	Client Info		3457	3004	2511
Oil Age	hrs	Client Info		453	493	598
Filter Age	hrs	Client Info		453	493	598
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	18	9	19
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	3
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

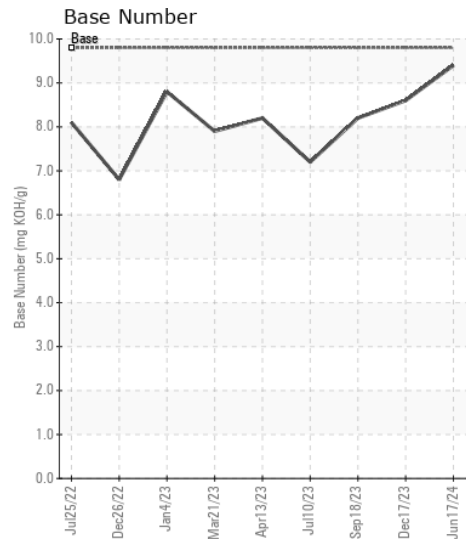
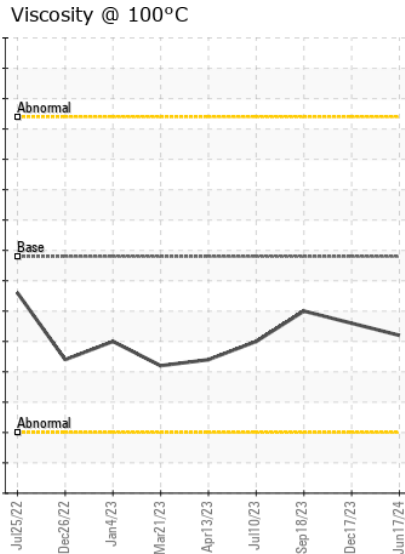
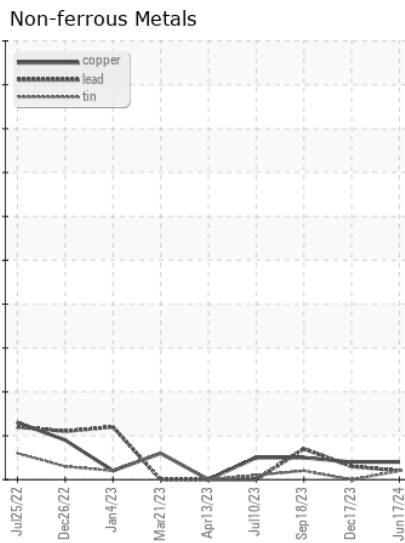
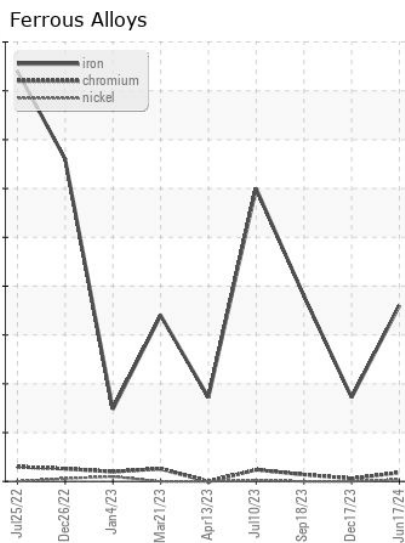
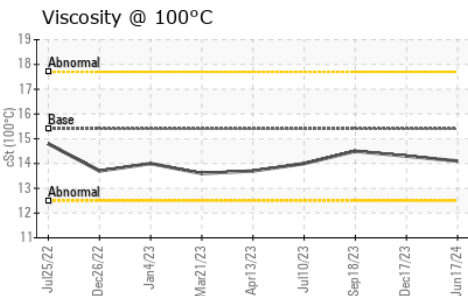
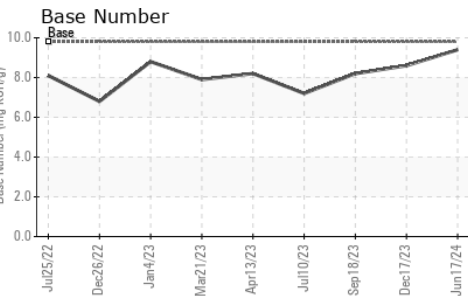
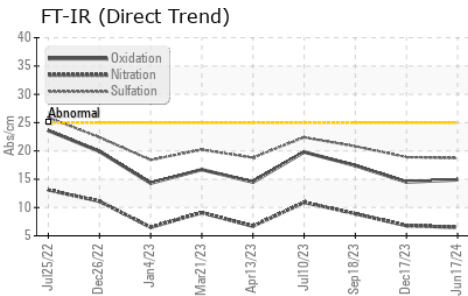
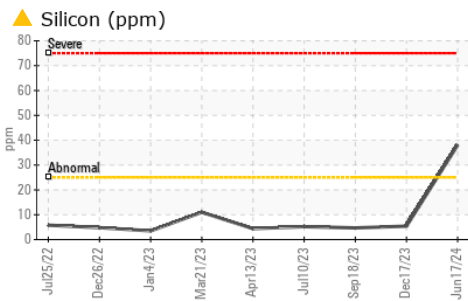
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>25	▲ 38	5	5
Potassium	ppm	ASTM D5185m	>20	6	0	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	>6	0.2	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.8	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	18.9	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		3	2	6
Boron	ppm	ASTM D5185m	0	5	3	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	56	63
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	1084	910	908
Calcium	ppm	ASTM D5185m	1070	1242	1058	1091
Phosphorus	ppm	ASTM D5185m	1150	1183	1066	1046
Zinc	ppm	ASTM D5185m	1270	1453	1257	1279
Sulfur	ppm	ASTM D5185m	2060	4310	3107	3296
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	14.5	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.4	8.6	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.3	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124751 **Received** : 01 Jul 2024
Lab Number : 06224368 **Tested** : 02 Jul 2024
Unique Number : 11102565 **Diagnosed** : 02 Jul 2024 - Jonathan Hester
Test Package : FLEET

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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)