



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA116924)

Machine Id

2512

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (30 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0082425	GFL0082444	GFL0050792
Sample Date		Client Info		11 Jun 2024	07 Sep 2023	03 May 2023
Machine Age	mls	Client Info		493220	20950	20327
Oil Age	mls	Client Info		492220	350	598
Filter Age	mls	Client Info		330882	350	598
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	27	16	29
Chromium	ppm	ASTM D5185m	>5	2	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	1	3
Lead	ppm	ASTM D5185m	>150	4	2	0
Copper	ppm	ASTM D5185m	>90	1	3	10
Tin	ppm	ASTM D5185m	>5	<1	2	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

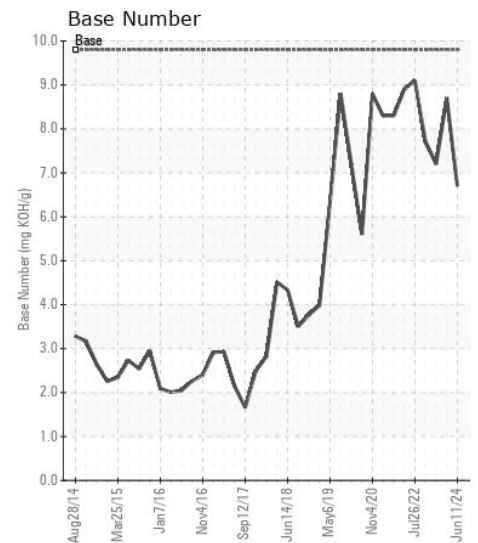
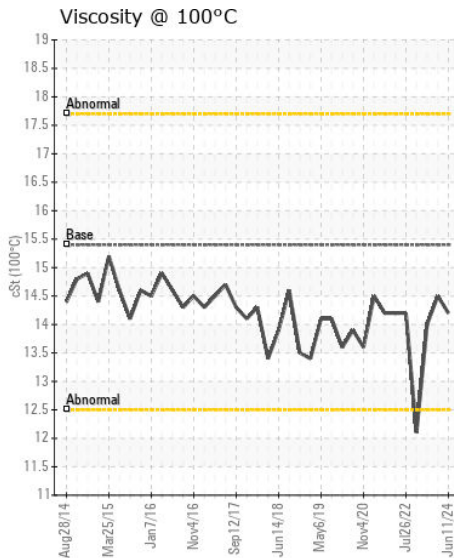
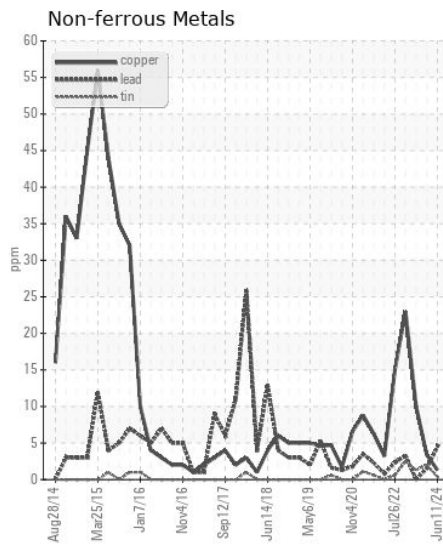
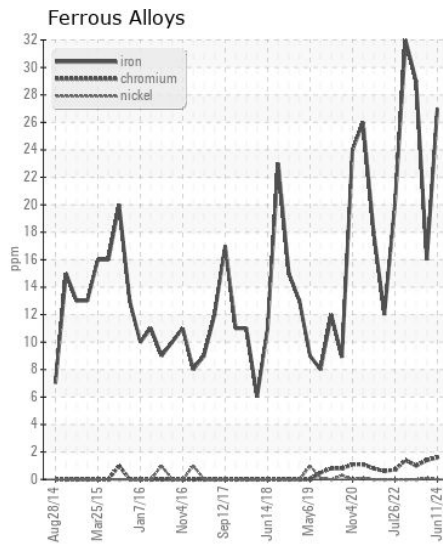
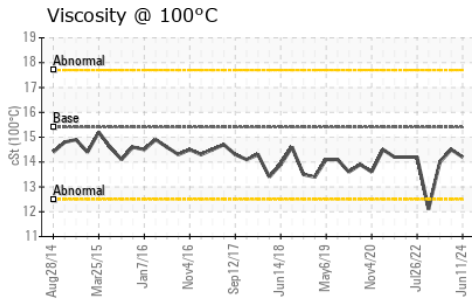
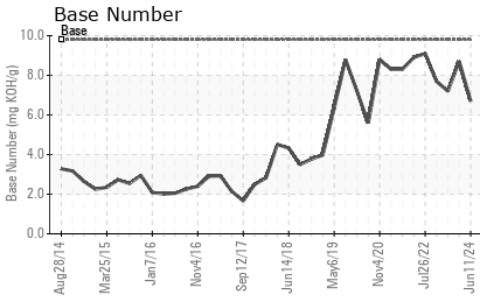
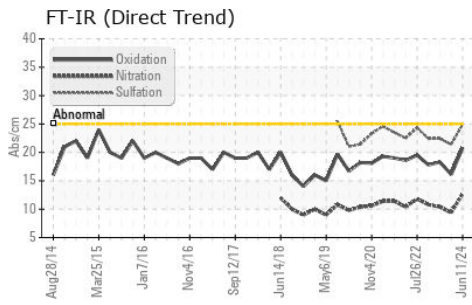
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>35	9	10	21
Potassium	ppm	ASTM D5185m	>20	3	4	<1
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	>7.5	1.2	1.2	1.4
Nitration	Abs/cm	*ASTM D7624	>20	12.7	9.4	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	21.4	22.4
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		6	6	5
Boron	ppm	ASTM D5185m	0	0	1	5
Barium	ppm	ASTM D5185m	0	0	44	0
Molybdenum	ppm	ASTM D5185m	60	66	57	62
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	1010	1149	888	940
Calcium	ppm	ASTM D5185m	1070	1308	965	1192
Phosphorus	ppm	ASTM D5185m	1150	1227	933	1010
Zinc	ppm	ASTM D5185m	1270	1533	1137	1296
Sulfur	ppm	ASTM D5185m	2060	4094	3156	3219
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	16.1	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	8.7	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.5	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0082425
Lab Number : 06215579
Unique Number : 11088443
Test Package : FLEET

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@gflenv.com

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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