



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
923031-260313
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124063	GFL0117245	GFL0117196
Sample Date		Client Info		18 Jun 2024	02 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		6335	6198	6025
Oil Age	hrs	Client Info		0	0	600
Filter Age	hrs	Client Info		0	0	600
Oil Changed		Client Info		Not Chngd	Not Chngd	Changed
Filter Changed		Client Info		Not Chngd	Not Chngd	Changed
Sample Status				MARGINAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	11	5	41
Chromium	ppm	ASTM D5185m	>4	<1	<1	2
Nickel	ppm	ASTM D5185m	>2	0	0	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	12
Lead	ppm	ASTM D5185m	>45	<1	0	<1
Copper	ppm	ASTM D5185m	>85	<1	<1	2
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

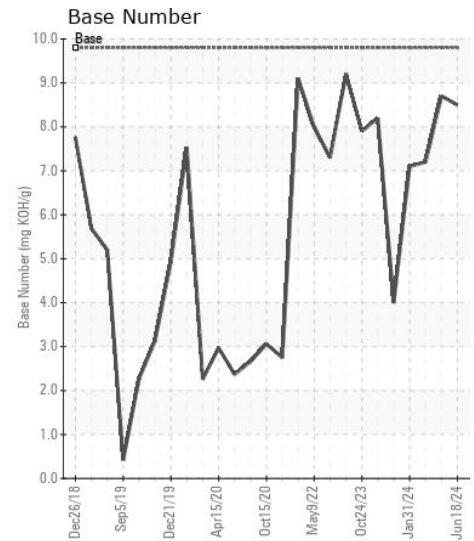
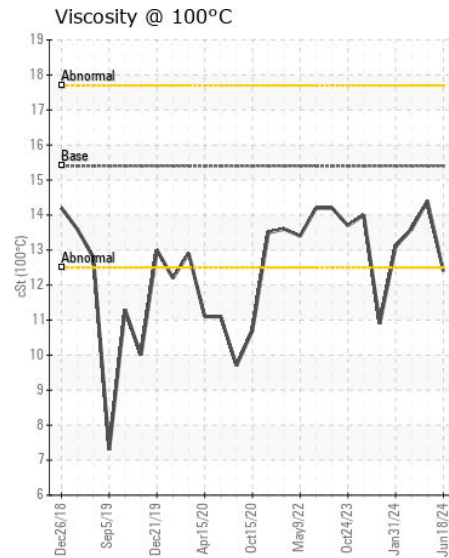
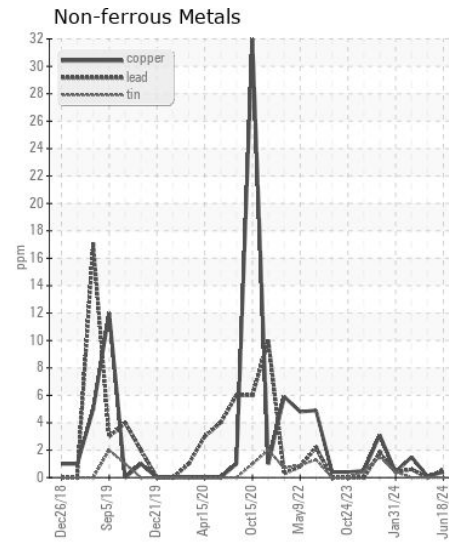
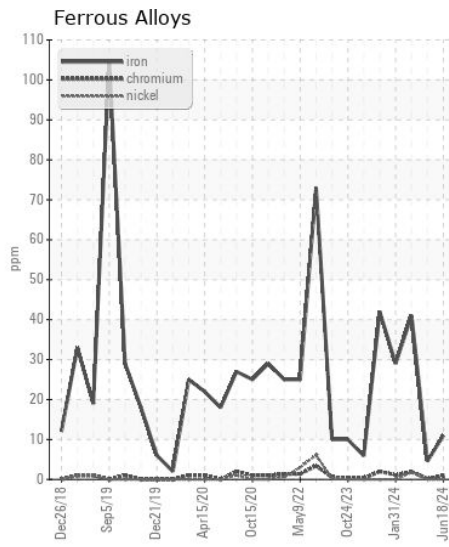
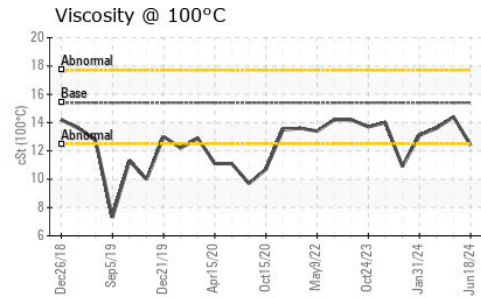
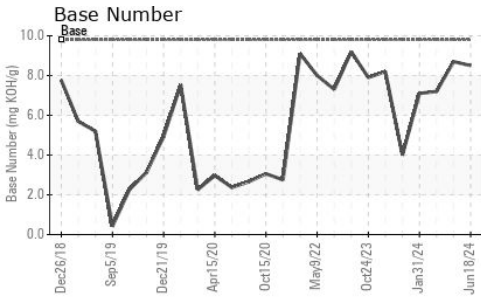
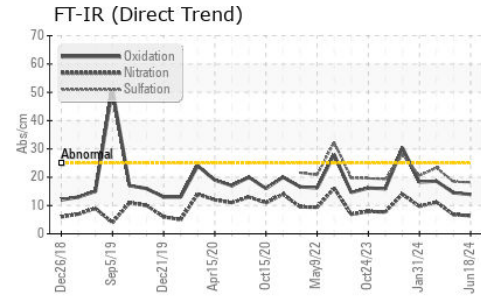
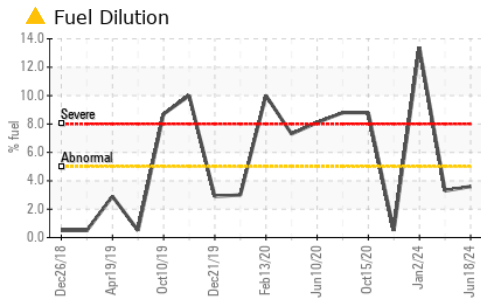
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>30	8	2	5
Potassium	ppm	ASTM D5185m	>20	3	2	24
Fuel	%	ASTM D3524	>5	▲ 3.6	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	1.8
Nitration	Abs/cm	*ASTM D7624	>20	6.4	6.8	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	18.4	23.3
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		4	10	17
Boron	ppm	ASTM D5185m	0	3	3	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	57	59	63
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	943	958	949
Calcium	ppm	ASTM D5185m	1070	1186	1105	1152
Phosphorus	ppm	ASTM D5185m	1150	1096	1073	1012
Zinc	ppm	ASTM D5185m	1270	1330	1281	1271
Sulfur	ppm	ASTM D5185m	2060	3752	3638	3422
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	14.5	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	8.7	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	12.4	14.4	13.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124063
Lab Number : 06215615
Unique Number : 11088479
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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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F: