



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
(DQY489)
Machine Id
10558
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (9 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		GFL0072164	GFL0072071	GFL0072031
Sample Date		Client Info		26 Jun 2024	22 Mar 2024	18 Dec 2023
Machine Age	hrs	Client Info		26440	25642	25036
Oil Age	hrs	Client Info		798	600	600
Filter Age	hrs	Client Info		0	600	600
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Cleaned	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	11	48	10
Chromium	ppm	ASTM D5185m	>5	1	2	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>15	3	8	2
Lead	ppm	ASTM D5185m	>25	<1	3	0
Copper	ppm	ASTM D5185m	>100	5	▲ 93	<1
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

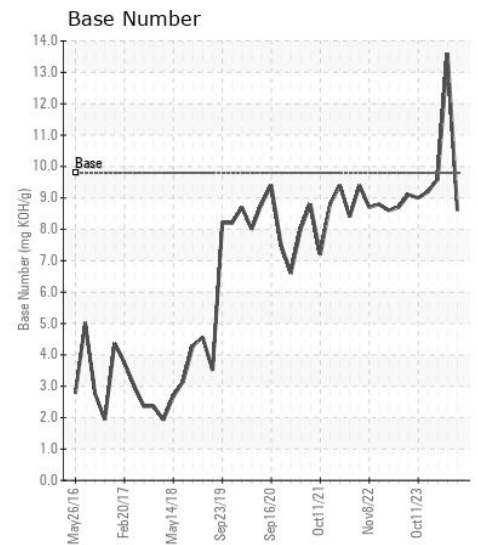
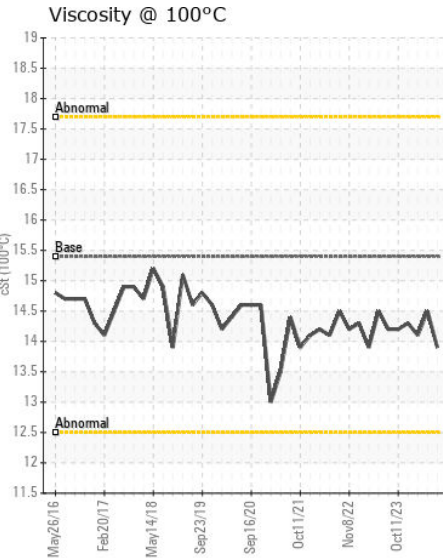
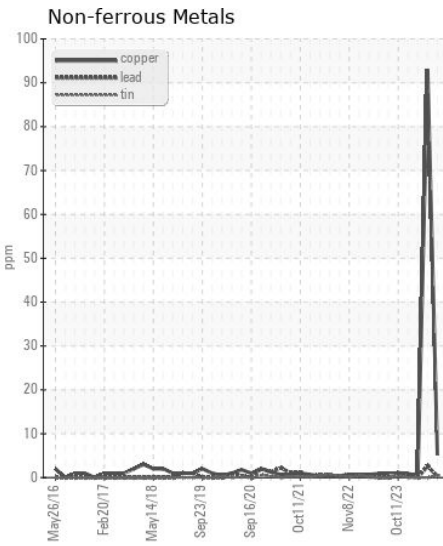
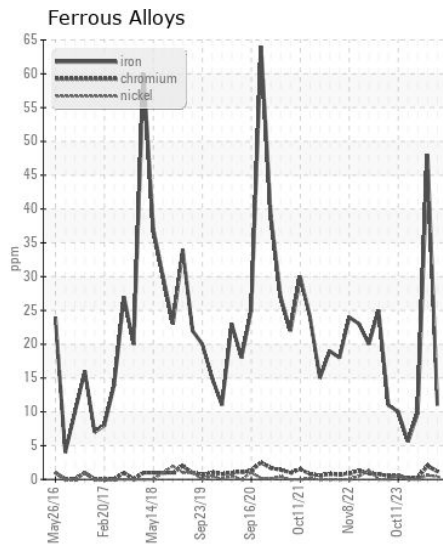
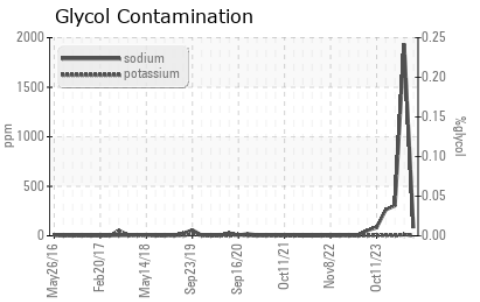
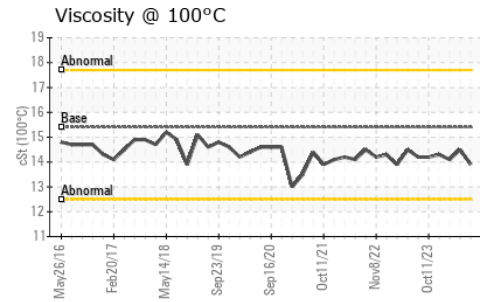
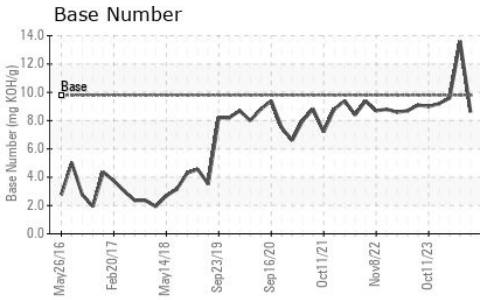
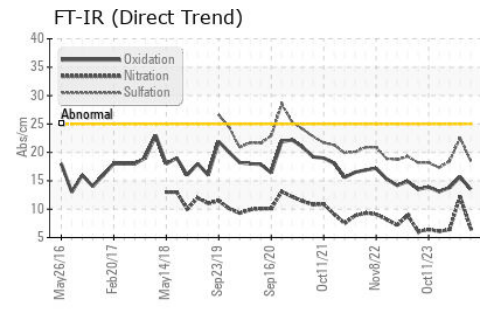
Sodium and/or potassium levels remain high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>25	6	▲ 45	8
Potassium	ppm	ASTM D5185m	>20	3	▲ 13	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.7	12.2	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	22.6	18.4
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		● 81	▲ 1935	▲ 305
Boron	ppm	ASTM D5185m	0	4	21	6
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	66	117	68
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	894	979	1022
Calcium	ppm	ASTM D5185m	1070	1066	1175	1102
Phosphorus	ppm	ASTM D5185m	1150	975	1063	1066
Zinc	ppm	ASTM D5185m	1270	1176	1297	1313
Sulfur	ppm	ASTM D5185m	2060	2676	3857	3301
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.5	15.7	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	13.6	9.6
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	14.5	14.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0072164 **Received** : 02 Jul 2024
Lab Number : 06226015 **Tested** : 05 Jul 2024
Unique Number : 11109508 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 094 - Cedartown
 2097 Buchanan Highway
 Cedartown, GA
 US 30125
 Contact: WILLIAM FOSTER
 william.foster@gflenv.com
 T: (800)207-6618
 F:

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)