



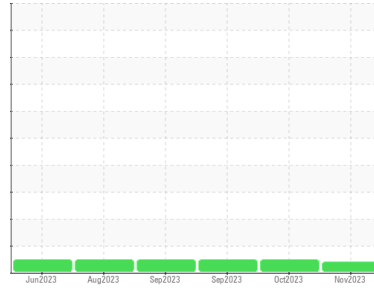
PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

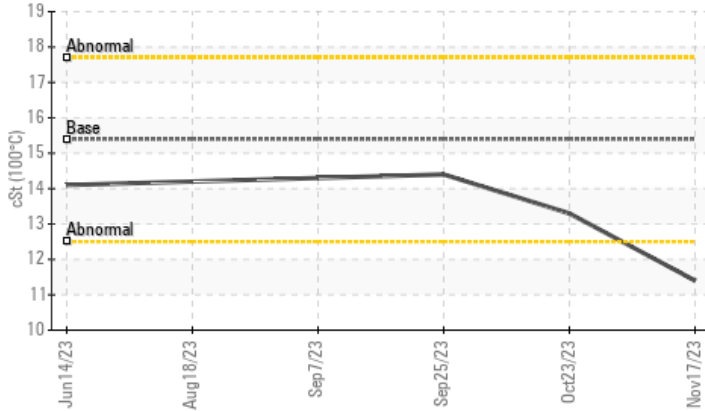


Area
{UNASSIGNED}
 Machine Id
834023
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)



COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.4	13.3	14.4

Customer Id: GFL010
 Sample No.: GFL0101204
 Lab Number: 06011904
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 Oct 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



25 Sep 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



07 Sep 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report





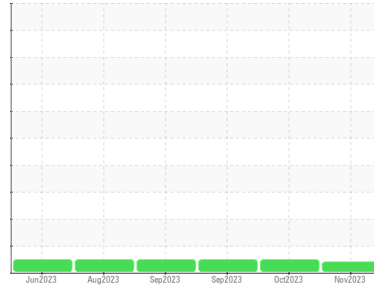
OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Area
{UNASSIGNED}
 Machine Id
834023
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)



DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0101204	GFL0091429	GFL0094285	
Sample Date	Client Info	17 Nov 2023	23 Oct 2023	25 Sep 2023	
Machine Age	hrs	Client Info	900	740	615
Oil Age	hrs	Client Info	285	125	615
Oil Changed	Client Info	Not Chngd	Not Chngd	Changed	
Sample Status		ATTENTION	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>90	37	14	43
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	4
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	1	3	18
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	9	6	3
Barium	ppm	ASTM D5185m	0	0	3	6
Molybdenum	ppm	ASTM D5185m	60	57	62	55
Manganese	ppm	ASTM D5185m	0	<1	2	12
Magnesium	ppm	ASTM D5185m	1010	733	813	816
Calcium	ppm	ASTM D5185m	1070	967	1084	1233
Phosphorus	ppm	ASTM D5185m	1150	846	958	671
Zinc	ppm	ASTM D5185m	1270	1029	1114	913
Sulfur	ppm	ASTM D5185m	2060	2429	3208	2319

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	10	8	36
Sodium	ppm	ASTM D5185m		57	3	5
Potassium	ppm	ASTM D5185m	>20	3	2	2
Fuel	%	ASTM D3524	>3.0	0.1	<1.0	<1.0

INFRA-RED

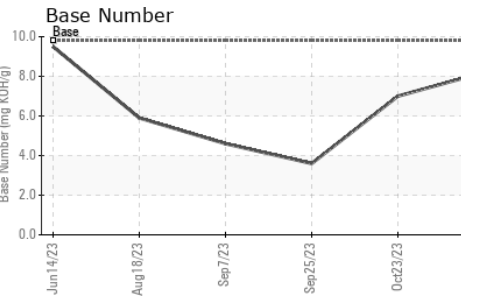
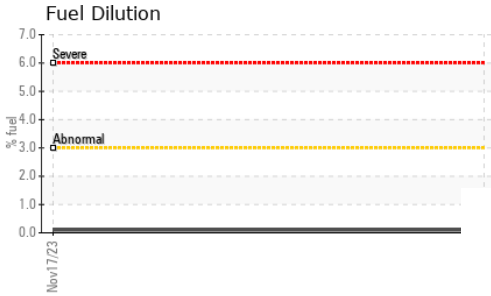
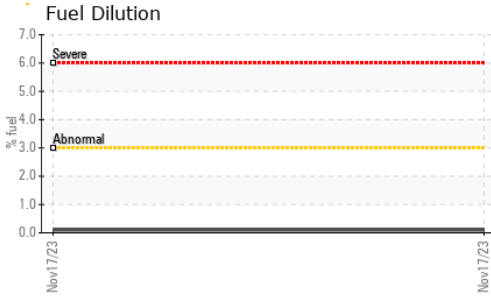
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>6	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	4.8	6.8	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.7	17.4	22.7

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.9	13.5	22.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	7.0	3.6



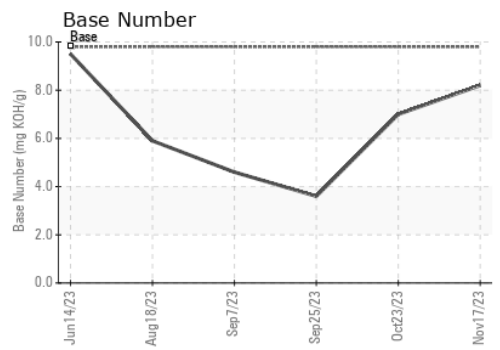
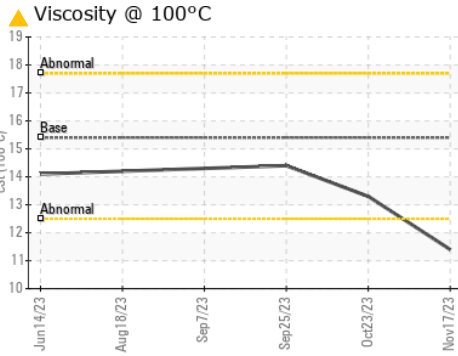
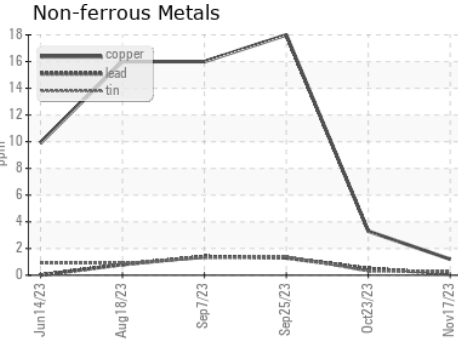
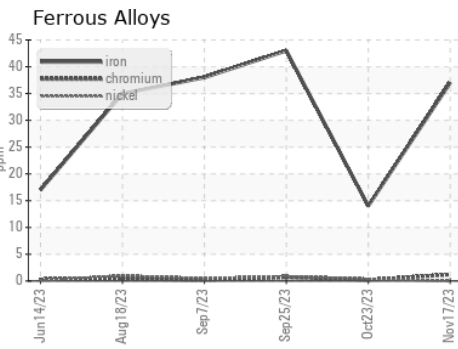
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4 ▲ 11.4	13.3	14.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101204 **Received** : 20 Nov 2023
Lab Number : 06011904 **Diagnosed** : 29 Nov 2023
Unique Number : 10751048 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 010 - Stockbridge
 1280 Rum Creek Parkway
 Stockbridge, GA
 US 30281
 Contact: JOSHUA TINKER
 joshuatinker@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)