

# **OIL ANALYSIS REPORT**

Sample Rating Trend

## NORMAL

## Machine Id 10714 Component Diesel Engine Fluid PETRO CANADA DURON SHP 15W40 (28 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

Area

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

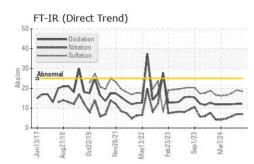
### Fluid Condition

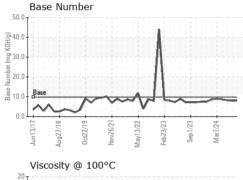
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

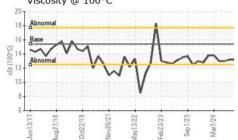
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0122158	GFL0122194	GFL0118068
Sample Date		Client Info		08 Jul 2024	23 May 2024	26 Apr 2024
Machine Age	hrs	Client Info		2138	1999	1855
Oil Age	hrs	Client Info		561	422	278
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	39	37	17
Chromium	ppm	ASTM D5185m		1	2	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>15	6	6	4
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	3	4	3
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	6	15	12
Barium	ppm		0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	61	69	61
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	868	921	875
Calcium	ppm	ASTM D5185m	1070	1121	1125	1110
Phosphorus	ppm	ASTM D5185m	1150	1027	1010	997
Zinc	ppm	ASTM D5185m	1270	1223	1210	1210
Sulfur	ppm	ASTM D5185m	2060	3320	3439	3521
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10	11	9
Sodium	ppm	ASTM D5185m		4	3	2
Potassium	ppm	ASTM D5185m	>20	5	8	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	1.2	1.3	0.7
Nitration	Abs/cm	*ASTM D7624	>20	7.0	7.0	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.1	17.4
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.1	12.2	11.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.0	8.0	8.2



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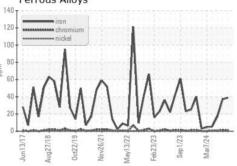


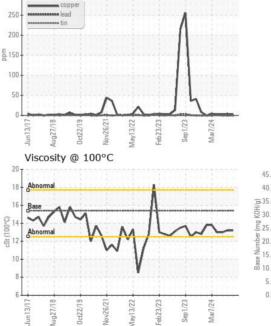
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.2	13.0
GRAPHS						

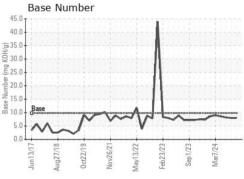
Ferrous Alloys

Non-ferrous Metals

300







Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 010 - Stockbridge Sample No. : GFL0122158 Received : 09 Jul 2024 1280 Rum Creek Parkway Lab Number : 06231322 Tested : 10 Jul 2024 Stockbridge, GA Unique Number : 11114815 Diagnosed : 10 Jul 2024 - Wes Davis US 30281 Test Package : FLEET Contact: JOSHUA TINKER Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. joshuatinker@gflenv.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: 

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: JOSHUA TINKER Page 2 of 2

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