

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id 526066

Fluid

Component Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS	
Recommendation	

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

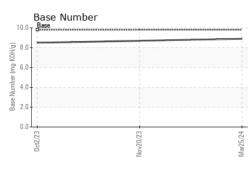
Fluid Condition

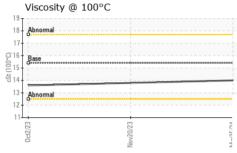
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0097819	GFL0085267	GFL0085278
Sample Date		Client Info		25 Mar 2024	20 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info		22891	22891	0
Oil Age	hrs	Client Info		63	400	600
Oil Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	0.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	6	22	8
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	4	7	3
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	1	<1	1
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	16	18	37
Barium	ppm	ASTM D5185m	0	<1	0	12
Molybdenum	ppm	ASTM D5185m	60	53	43	45
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	845	811	764
Calcium	ppm	ASTM D5185m	1070	1208	1321	1291
Phosphorus	ppm	ASTM D5185m	1150	997	935	877
Zinc	ppm	ASTM D5185m	1270	1147	1120	1067
Sulfur	ppm	ASTM D5185m	2060	3118	2753	2777
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	7	4
Sodium	ppm	ASTM D5185m		2	1	2
Potassium	ppm	ASTM D5185m	>20	2	0	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	5.9	8.9	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	21.9	20.0
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
FLUID DEGRAD	DATION Abs/.1mm	method *ASTM D7414	limit/base >25	current 15.4	history1 19.0	history2 16.2



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VISUAL		method	limit/base	current	history1	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	ERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	13.8	13.6
GRAPHS						
Ferrous Alloys						
5 T						
iron						
and a chromium	\sim					
0 - nickel	$\langle \ \rangle$					
5						
0						
1			1			
5						
	****		222200000			
	/23		/24			
0ct2/23	Vav20/23		Mar25/24			
0	No		Ň			
Non-ferrous Meta	s					
copper						
8						
• • • • • • • • • • • • • • • • • • •						
6						
4						
2						
0ct2/23)/23		5/24			
Octí	Vov20/23		Mar25/24			
	Nc		×			
Viscosity @ 100°0	2			Dees Number		
) _T				Base Number		

10.0

8 (mg KOH/g)

6 Number 4 (Base

0.0

0ct2/23

Mar25/24 -

: 29 Mar 2024

: 01 Apr 2024



Unique Number : 10953394 Diagnosed : 01 Apr 2024 - Wes Davis Test Package : FLEET Certificate L2367 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)

Nov20/23

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

18 17

()-16 ()-00 () 15 () 14

13 Abnorma 12 11-

: GFL0097819

Laboratory Sample No.

Lab Number : 06133929

Nov20/23

GFL Environmental - 957 - Pekin - Tazewell County

14379 Illinois Rte 29

Contact: Bryan Link

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Mar25/24

F: