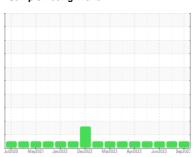


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



724002
Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (26 QTS)

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

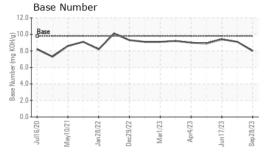
Fluid Condition

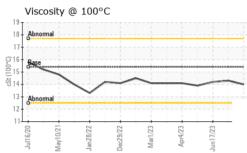
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

QIS)		Jul2020 Ma	y2021 Jan2022 Dec20	22 Mar2023 Apr2023 Jun20	23 Sep2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0094791	GFL0086315	GFL0086293	
Sample Date		Client Info		28 Sep 2023	19 Jul 2023	17 Jun 2023	
Machine Age	hrs	Client Info		22304	22182	22055	
Oil Age	hrs	Client Info		249	127	0	
Oil Changed		Client Info		N/A	Not Changd	Changed	
Sample Status				NORMAL	NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2	
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>75	33	29	21	
Chromium	ppm	ASTM D5185m	>5	2	2	<1	
Nickel	ppm	ASTM D5185m	>4	<1	<1	0	
Titanium	ppm	ASTM D5185m	>2	0	0	0	
Silver	ppm	ASTM D5185m	>2	0	0	0	
Aluminum	ppm	ASTM D5185m	>15	5	5	<1	
Lead	ppm	ASTM D5185m	>25	0	0	0	
Copper	ppm		>100	<1	<1	<1	
Tin	ppm	ASTM D5185m	>4	<1	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	4	3	8	
Barium	ppm	ASTM D5185m	0	0	2	0	
Molybdenum	ppm	ASTM D5185m	60	60	63	60	
Manganese	ppm	ASTM D5185m	0	<1	<1	<1	
Magnesium	ppm	ASTM D5185m	1010	928	1087	968	
Calcium	ppm	ASTM D5185m	1070	988	1141	1051	
Phosphorus	ppm	ASTM D5185m	1150	1012	1127	1037	
Zinc	ppm	ASTM D5185m	1270	1220	1406	1282	
Sulfur	ppm	ASTM D5185m	2060	2845	3994	3787	
CONTAMINAN	ITS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	7	2	
Sodium	ppm	ASTM D5185m		8	7	<1	
Potassium	ppm	ASTM D5185m	>20	4	5	<1	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.3	0.2	1.5	
Nitration	Abs/cm	*ASTM D7624	>20	8.0	6.9	6.7	
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	18.0	19.6	
FLUID DEGRADATION method limit/base current history1 history2							
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	14.2	13.5	
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	9.1	9.4	
Dago (Marrider (DIV)	mg nong	, 10 TIVI D2000	0.0	0.0	0.1	V. T	



OIL ANALYSIS REPORT

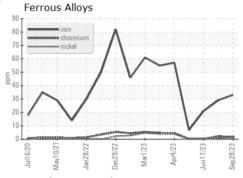


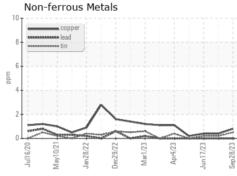


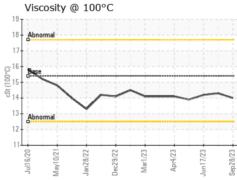
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

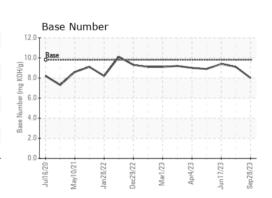
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.3	14.2

GRAPHS













Certificate L2367

Test Package : FLEET

Laboratory Sample No. Lab Number Unique Number : 10687323

: GFL0094791 : 05975373

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

: 11 Oct 2023 : 11 Oct 2023 Diagnostician : Wes Davis

GFL Environmental - 868 - Childersburg Fines Hauling (Alpine)

13737 Plant Rd Childersburg, AL US 35044

Contact: JONATHAN WILLIAMS jonathan.williams@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)

Report Id: GFL868 [WUSCAR] 05975373 (Generated: 10/13/2023 10:55:37) Rev: 1

Submitted By: see also GFL868 - Chelsea Bryan

T:

F: