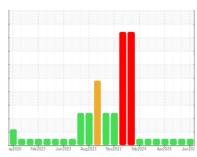


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id 921057-205334

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

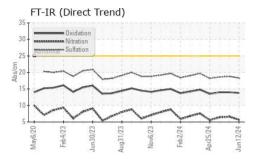
Fluid Condition

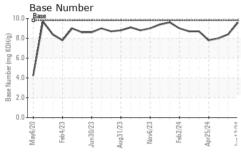
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

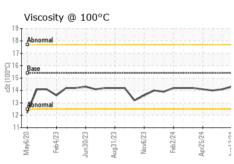
#\daggardard						
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0121478	GFL0105298	GFL0105096
Sample Date		Client Info		12 Jun 2024	28 May 2024	15 May 2024
Machine Age	hrs	Client Info		8510	8445	8365
Oil Age	hrs	Client Info		150	2400	150
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<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	>100	3	9	7
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	2	1
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	0	0
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	60	57	54	56
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	913	838	960
Calcium	ppm	ASTM D5185m	1070	1051	971	1058
Phosphorus	ppm	ASTM D5185m	1150	1089	827	1029
Zinc	ppm	ASTM D5185m	1270	1236	1111	1246
Sulfur	ppm	ASTM D5185m	2060	3339	2888	3631
CONTAMINAN	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	3	3	2
Sodium	ppm	ASTM D5185m		3	8	8
Potassium	ppm	ASTM D5185m	>20	4	7	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	5.7	6.6	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	18.8	18.6
FLUID DEGRADATION method limit/base current history1 history2						
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	14.0	14.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.6	8.4	8.0



OIL ANALYSIS REPORT







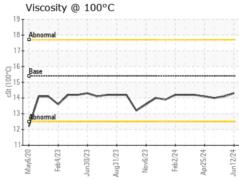
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

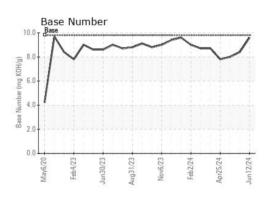
FLUID PROPI	ERHES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	14.1	14.0

GRAPHS

Ferrous Alloys 20

25 -	Non-fer	rous Me	etals				
20-	*****	copper lead tin		1			
15 - udd				/\			
10-							
5				L		0	
OC Series	Feb4/23	Jun30/23	Aug31/23	Nov6/23	Feb2/24	Apr25/24	Jun12/24
,	/iccocit	@ 100	200				









Certificate 12367

Laboratory Sample No.

: GFL0121478 Lab Number : 06219281 Unique Number : 11097478 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Jun 2024

Tested : 25 Jun 2024 Diagnosed

: 25 Jun 2024 - Wes Davis

GFL Environmental - 821 - Ozarks Hauling 33924 Olath Drive Lebanon, MO US 65536

Contact: Landen Johnson landen.johnson@gflenv.com T: (417)664-0010

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)