

OIL ANALYSIS REPORT

Area [1306498] 101043

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

Test for glycol is negative. There is no indication of any contamination in the oil.

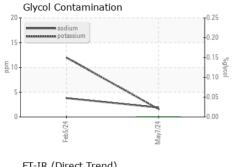
Fluid Condition

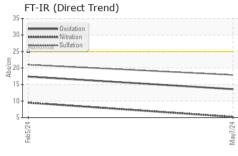
The condition of the oil is acceptable for the time in service.

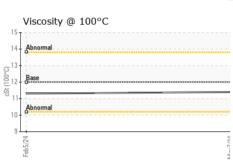
iAL)			Feb 2024	May2024		
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0116413	GFL0107933	
Sample Date		Client Info		07 May 2024	05 Feb 2024	
Machine Age	hrs	Client Info		11071	10575	
Oil Age	hrs	Client Info		15	500	
Oil Changed	1110	Client Info		Not Changd	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
WEAR METAI	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>110	7	25	
Chromium	ppm	ASTM D5185(m)	>4	0	<1	
Nickel	ppm	ASTM D5185(m)	>2	0	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	<1	0	
Aluminum	ppm	ASTM D5185(m)	>25	1	7	
Lead	ppm	ASTM D5185(m)	>45	0	<1	
Copper	ppm	ASTM D5185(m)	>85	<1	<1	
Tin	ppm	ASTM D5185(m)	>4	0	<1	
Antimony	ppm	ASTM D5185(m)	7 4	0	0	
Vanadium		ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	2	<1	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	50	56	61	
Manganese	ppm	ASTM D5185(m)	0	0	0	
Magnesium	ppm	ASTM D5185(m)	950	937	999	
Calcium	ppm	ASTM D5185(m)	1050	1006	1089	
Phosphorus	ppm	ASTM D5185(m)	995	968	1038	
Zinc	ppm	ASTM D5185(m)	1180	1162	1221	
Sulfur	ppm	ASTM D5185(m)	2600	2568	2722	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	2	4	
Sodium	ppm	ASTM D5185(m)		2	4	
Potassium	ppm	ASTM D5185(m)	>20	2	12	
Glycol	%	ASTM D7922*		0.0	NEG	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0	0.3	
Nitration	Abs/cm	ASTM D7624*	>20	5.2	9.5	
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.9	21.0	



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FLUID DEGRA	DATION	method				history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.6	17.4	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	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 PROPE	RTIES	method	limit/base	current	history1	history2
\/: @ 1000C	- C+	A OTM D7070/>	10.00	44.4	11.0	

Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.3	
GRAPHS						
Iron (ppm) Severe				Lead (ppm)		
Abnormal				Abnormal		
50				20		
0 Feb 5/24			May7/24	- Feb5/24		May7/24
Aluminum (ppm)			Chromium	(ppm)	
40 Severe				Severe		
Abnormal				Abnormal		
10				2		
Feb5/24			May7/24	Feb5/24		May7/24
Copper (ppm)				Silicon (ppn	n)	
Severe				40	***************************************	
Abnormal				8 30 Abnormal		
50				10		
Feb5/24			May7/24	Feb5/24		May7/24
Viscosity @ 100	°C			Soot %		
Abnormal			0000	Severe		



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02646160 Unique Number : 5811712

: GFL0116413

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Received **Tested** Diagnosed

: 08 Jul 2024 : 08 Jul 2024 : 08 Jul 2024 - Kevin Marson

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: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 350 - Emeral Park Regina 2B Industrial Drive,, Great Plains Industrial Park, Emerald Park, SK

CA S4L 1B6 Contact: Vaughn Hortness vhortness@gflenv.com T: (877)244-9500

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Test Package : MOB 1 (Additional Tests: Glycol, Visual)

Contact/Location: Vaughn Hortness - GFL350

F: (306)244-9501