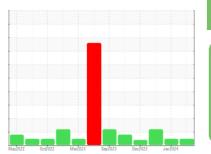


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id

811057

Component Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

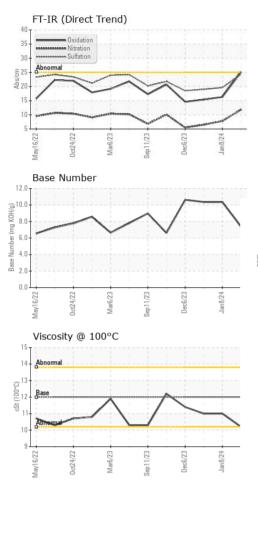
Fluid Condition

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		GFL0112434	GFL0099549	GFL0099596
Sample Date		Client Info		30 Jun 2024	08 Jan 2024	18 Dec 2023
Machine Age	hrs	Client Info		659	856	731
Oil Age	hrs	Client Info		659	236	111
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status			NORMAL		NORMAL	ABNORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	▲ 3.3
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 D5185(m)	>100	67	20	14
Chromium	ppm	ASTM D5185(m)	>20	3	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)		6	3	3
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	1	<1	1
Tin	ppm	ASTM D5185(m)	>15	3	<1	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES	le le	method	limit/base	current	history1	history2
Boron	nom	ASTM D5185(m)	2	2	1	2
Barium	ppm ppm	ASTM D5185(m)		2 <1	0	0
Molybdenum		ASTM D5185(m)	50	56	57	58
Manganese	ppm ppm	ASTM D5185(m)		1	0	0
Magnesium		ASTM D5185(m)	950	926	937	943
Calcium	ppm ppm	ASTM D5185(m)	1050	981	1027	1031
Phosphorus		ASTM D5185(m)	995	941	995	998
Zinc	ppm ppm	ASTM D5185(m)		1149	1151	1149
Sulfur		ASTM D5185(m)	2600	2260	2616	2648
Lithium	ppm ppm	ASTM D5185(m)	2000	<1	<1	<1
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5	4	4
Sodium	ppm	ASTM D5185(m)	> 20	2	1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	0	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.7	0.2	0.1
Nitration	Abs/cm	ASTM D7624*		11.8	7.8	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.3	19.6	19.0



OIL ANALYSIS REPORT



	FLUID DEGRA	DATION	method	limit/base	curre	ent	history1	h	istory2	
	Oxidation		ASTM D7414*	>25	25.1		6.3	15		
	Base Number (BN)	mg KOH/g	ASTM D2896*		7.39	1	0.36	10	.36	
1	VISUAL		method	limit/base	curre	ent	history1	h	listory2	
-	Emulsified Water				NEG		NEG		NEG	
-	Free Water		Visual*		NEG	Ν	NEG		NEG	
	FLUID PROPE	RTIES	method	limit/base	curre	ent	history1	h	istory2	
	Visc @ 100°C	cSt	ASTM D7279(m)	12.00	10.2	1	1.0	1 1	.0	
	GRAPHS					-				
	Iron (ppm) ²⁵⁰ T				Lead (p	pm)		· · · · · · · · · · ·		
	200 - Severe				30 - Severe	÷				
	= ¹⁵⁰			E	so -					
	100 - Abnormal			^{Ed}	0 - Abnormal					
-	50			1 2	20 -					
	22 22	23			52 0	22	23	23	24	
	May16/22 0ct24/22 Mar6/23	Sep 11/23	Dec6/23	Jan 8/24	May16/22	0ct24/22 Mar6/23	Sep11/23	Dec6/23	Jan8/24	
	Aluminum (ppm)				Chromi	um (ppm)				
	50 40 Severe				Severe					
			**************		10 - Severe					
	Abnormal			- Ed	Abnormal					
	10-				10					
_	0				0		\sim			
	May16/22 0ct24/22 Mar6/23	Sep11/23	Dec6/23	Jan 8/24	May16/22	0ct24/22 Mar6/23	Sep11/23	Dec6/23	Jan 8/24	
	≊	Se		7	≝ Silicon (-	Se		7	
	400 T			3	Sincon ((ppin)				
	Severe Abnormal 300 -			θ	so -					
	툍 200 -			<u>ق</u> 4	10					
					Abnormal	+	\wedge			
	100			2	20	/	$\$			
	ay16/22	1/23	Dec6/23	Jan 8/24	3/22	0ct24/22 - Mar6/23 -	/23 -	Dec6/23 -	Jan8/24 -	
	May16/22 0ct24/22 Mar6/23	Sep11/23	Dec	Jan	May16/22 -	0ct24/22 Mar6/23	Sep11/23	Dec	Jan	
	Viscosity @ 100°C	2			Base Nu	umber				
	14 - Abnormal							-		
	0 ¹³			0(0) Base Number (mg KOH/g) 8 9 9 0	.0	\sim	\wedge			
	D-0012 12 3 11			nmber -	.0	Ť				
	10 Abnormal	\smile		Base N 4	.0					
	13 15 10 10 10 10 10 10 10 10 10 10 10 10 10	<u>m</u>		- 0	.0	3 2	5	5	4	
	May16/22 0ct24/22 Mar6/23	Sep11/23	Dec6/23	Jan 8/24	May16/22	0ct24/22 Mar6/23	Sep11/23	Dec6/23	Jan 8/24	
	2 0	0			2		65			
ory	: WearCheck - C8-117	5 Appleby	Line, Burlir	ngton, ON L7	'L 5H9 G	FL Environm	iental - 550	- Rocky Vi	ew Cor	
	: GFL0112434	Receiv Tested	red : 0	5 Jul 2024 5 Jul 2024				220 Cari View Co	mek B	
				1.00/4					untv.	
No. Iber mber	: <mark>02645721</mark> : 5803260	Diagno		3 Jul 2024 - V	Ves Davis		,		T1X 1	

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

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