

OIL ANALYSIS REPORT

Sample Rating Trend



Area [833314] Machine Id A125 27047

Component Diesel Engine

Fluid PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

¬ - /			Nov2022	Feb2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0085022	PC0067596	
Sample Date		Client Info		22 Feb 2024	17 Nov 2022	
Machine Age	hrs	Client Info		99246	4818	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	Changed	
Sample Status				NORMAL	MARGINAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	2 .7	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	12	10	
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	
Nickel	ppm	ASTM D5185(m)	>4	<1	0	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>3	0	0	
Aluminum	ppm	ASTM D5185(m)	>20	2	1	
Lead	ppm	ASTM D5185(m)	>40	6	2	
Copper	ppm	ASTM D5185(m)	>330	2	2	
Tin	ppm	ASTM D5185(m)	>15	<1	<1	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	5	47	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	60	61	61	
Manganese	ppm	ASTM D5185(m)	0	0	<1	
Magnesium	ppm	ASTM D5185(m)	1010	980	1083	
Calcium	ppm	ASTM D5185(m)	1070	1081	1034	
Phosphorus	ppm	ASTM D5185(m)	1150	1017	1066	
Zinc	ppm	ASTM D5185(m)	1270	1190	1234	
Sulfur	ppm	ASTM D5185(m)	2060	2679	2781	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	3	4	
Sodium	ppm	ASTM D5185(m)		2	2	
Potassium	ppm	ASTM D5185(m)	>20	2	<1	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0.1	
Nitration	Abs/cm	ASTM D7624*		8.2	9.1	
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	23.1	
		-				



150 T Abnormal 140. 130 (), 120 - Base (), 00 (), 120 - Base (), 00 ()) (), 00 (), 00 (), 00 (), 100-90-Abnormal

> 80 Nov17/22

150

140 130 ()_02 120 (40.02) (110-()_22 120 Base

100-90 - Abnormal 80 Nov17/22

OIL ANALYSIS REPORT

Viscosity @ 40°C	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Abnormal	Oxidation	Abs/.1mm	ASTM D7414*	>25	15.9	18.4	
) - Base	VISUAL		method	limit/base	current	history1	history2
	Emulsified Water Free Water		Visual* Visual*	>0.2	NEG NEG	NEG NEG	
- Abnormal	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Nav17/22 Feb22/24	Visc @ 40°C	cSt	ASTM D7279(m)	118.2	98.4	93.0	
Viscosity @ 40°C	Visc @ 100°C		ASTM D7279(m)		13.4	12.8	
	Viscosity Index (VI) GRAPHS	Scale	ASTM D2270*	139	135	134	
)	Iron (ppm)				Lead (ppm)		
Base	250 T			100	T.		
	200 - Severe			80	Severe		
Abnormal	Abnormal			50 E 40	Abnormal		
Nov17/22 -	50-			20			
Nov				0	5		4
	Nov17/22			Feb22/24	Nov17/22		Feb22/24
	Aluminum (ppm)				Chromium (pp	om)	
	50 40 Severe			50	Severe		
	30				i.		
	Abnormal			³⁰ 20	Abnormal		
	10-			10			
	0			0	727		24
	Nov17			Feb22/24	Nov17/22		Feb22/24
	Copper (ppm)			80	Silicon (ppm) ⊤Severe		
	Severe			60			
	§ 200 -			특 40			
					Abnormal		
	100			20			
	0 17/22			Feb22/24	7/22		Feb22/24
				Feb2	Nov		Feb2
	Viscosity @ 100°C			6.0			
	18 - Abnormal			5.0	Severe		
	ි 16 - Base දී 14 - Abnormal			4.0 53.0	Abnormal		1
	75 14 Abnormal			2.0			
	10			1.0			
	Nov17/22			Feb22/24	Nov17/22		Feb22/24
Sample No. Iso 17025:2017 Accredited Laboratory Test Package To discuss this sample report, Test denoted (*) outside scope	: WearCheck - C8-1175 : PC0085022 : 02619207 : 5736317 : MOB 1 (Additional Tec contact Customer Servic	Receiv Tested Diagno sts: KV40 ce at 1-80 ethod mod	red : 01 I : 01 Desed : 01 I, VI) D0-268-2131 Dified, (e) te	gton, ON L7L Mar 2024 Mar 2024 Mar 2024 - Kevi '. sted at extern	- 5H9 in Marson nal Iab.	T Contact: Ante antonio.rodrigu	RE SERVICES YORK DRIVE ORONTO, ON CA M9L 1X6 onio Rodrigues

Contact/Location: Antonio Rodrigues - TFSTOR Page 2 of 2