

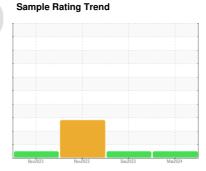
OIL ANALYSIS REPORT



(BC16434) 7839M Component

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

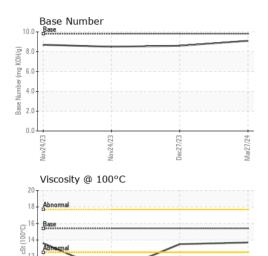
Fluid Condition

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

Sample Number Client Info GFL0117716 GFL0105815 GFL0089130 Sample Date Client Info 27 Mar 2024 27 Dec 2023 24 Nov 2023 Machine Age hrs Client Info 6784 6595 0 2840 Oil Changed Client Info 6595 0 2840 Oil Changed Sample Status Client Info NoRMAL NORMAL ABNORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method 55 <1.0	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 6784 6595 6454 Oil Age hrs Client Info 6595 0 2840 Oil Changed Client Info Not Changd Changed Changed Changed Changed Sample Status NorMAL NORMAL ABNORMAL CONTAMINATION method limil/base current history1 history2 Fuel WC Method >5 <1.0	Sample Number		Client Info		GFL0117716	GFL0105815	GFL0089130
Oil Age hrs Client Info 6595 0 2840 Oil Changed Sample Status Client Info Not Changed Changed Changed Changed ABNORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method S5 < 1.0	Sample Date		Client Info		27 Mar 2024	27 Dec 2023	24 Nov 2023
Client Info	Machine Age	hrs	Client Info		6784	6595	6454
CONTAMINATION method limit/bass current history1 history2	Oil Age	hrs	Client Info		6595	0	2840
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0 <1.0 0.6 Water WC Method >0.2 NEG NEG NEG Glycol WC Method Imit base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 40 32 23 Chromium ppm ASTM D5185m >5 1 2 <1 Nickel ppm ASTM D5185m >2 1 <1 2 <1 Silver ppm ASTM D5185m 30 6 9 6 6 Lead ppm ASTM D5185m >30 0 0 <1 129 Tin ppm ASTM D5185m >150 0 <1 129 Tin ppm ASTM D5185m 0 0	Oil Changed		Client Info		Not Changd	Changed	Changed
Fuel	Sample Status				NORMAL	NORMAL	ABNORMAL
Water WC Method >0.2 NEG NEG NEG Glycol WC Method Imit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >80 40 32 23 Chromitium ppm ASTM D5185m >5 1 2 <1 Nickel ppm ASTM D5185m >2 1 <1 2 <1 Silver ppm ASTM D5185m >2 0 0 <1 <1 2 <1 <1 2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1 <2 <1	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	0.6
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >5 1 2 Nickel ppm ASTM D5185m >2 1 <1 2 Titanium ppm ASTM D5185m >3 0 0 <1 Silver ppm ASTM D5185m >3 0 0 <1 Aluminum ppm ASTM D5185m >30 0 0 <1 Aluminum ppm ASTM D5185m >30 0 0 <1 129 Cadad ppm ASTM D5185m >30 0 <1 129 Tin ppm ASTM D5185m >5 0 <1 129 Tin ppm ASTM D5185m 0 0 0 <1 2 Vanadium ppm ASTM D5185m 0 0 0 <1 2 Vanadium ppm ASTM D5185m 0 0 0 <1 0 <1 0 0 <1 <	WEAR METAL	S	method	limit/base	current	history1	history2
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Titanium ppm ASTM D5185m 0 0 <1							
Silver ppm ASTM D5185m >3 0 0 <1							
Aluminum ppm ASTM D5185m >30 6 9 6 Lead ppm ASTM D5185m >30 0 0 <1 Copper ppm ASTM D5185m >150 0 <1 129 Tin ppm ASTM D5185m 5 0 <1 2 Vanadium ppm ASTM D5185m 0 0 0 <1 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 3 0 256 Barium ppm ASTM D5185m 0 0 0 0 Molybdenum ppm ASTM D5185m 0 4 56 100 Magnesium ppm ASTM D5185m 0 <1 0 3 Calcium ppm ASTM D5185m 1070 1004 1083				>3			
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Copper ppm ASTM D5185m >150 0 <1							
Tin ppm ASTM D5185m >5 0 <1							
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Nitration Abs/cm *ASTM D7624 >20 6.3 8.2 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 18.4 24.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.8 15.2 20.9	INFRA-RED		method	limit/base	current	history1	history2
Nitration Abs/cm *ASTM D7624 >20 6.3 8.2 8.3 Sulfation Abs/.1mm *ASTM D7415 >30 17.5 18.4 24.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 13.8 15.2 20.9	Soot %	%	*ASTM D7844	>3	0.2	0.3	0.3
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	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	15.2	20.9



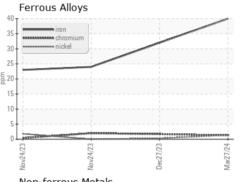
OIL ANALYSIS REPORT



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
	DTIES	mothod	limit/basa	current	history1	history?

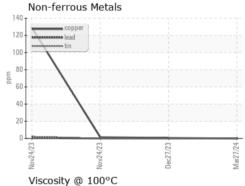
13.7

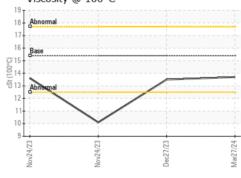
			Visc @ 100°C
	Abnormal		GRAPHS
ı			

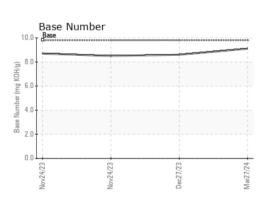


cSt

ASTM D445 15.4











Laboratory Sample No.

: GFL0117716 Lab Number : 06132987 Unique Number : 10952452 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 Mar 2024 **Tested** : 31 Mar 2024

Diagnosed : 02 Apr 2024 - Don Baldridge

GFL Environmental - 415 - Michigan East 6200 Elmridge

Sterling Heights, MI US 48313

0 10.1

13.5

Contact: Frank Wolak fwolak@gflenv.com T: (586)825-9514

Certificate L2367 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)