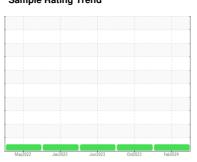


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **920118**

Component **Diesel Engine**

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

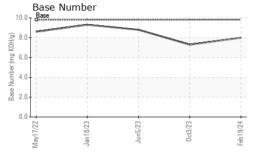
Fluid Condition

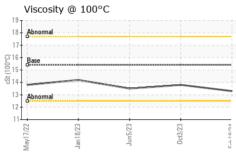
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Number Sample Date Machine Age hrs Oil Age hrs Oil Changed Sample Status CONTAMINATION Fuel Water Glycol W WEAR METALS Iron ppm AS Chromium ppm AS Nickel ppm AS Silver ppm AS Aluminum ppm AS Copper ppm AS Copper ppm AS Cadmium ppm AS Vanadium ppm AS Vanadium ppm AS Vanadium ppm AS Molybdenum ppm AS Magnesium ppm AS Magnesium ppm AS Magnesium ppm AS Calcium ppm AS Zinc ppm AS	method lient Info C Method C Method C Method C Method TM D5185m	limit/base >110 >4 >2 >2 >2 >25 >45	current GFL0106954 19 Feb 2024 8857 325 Changed NORMAL current <1.0 NEG NEG Current 11 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	history1 GFL0073246 03 Oct 2023 8186 745 Changed NORMAL history1 <1.0 NEG NEG history1 14 <1 0 0 0 0 <1 2	history2 GFL0073248 05 Jun 2023 7441 300 Changed NORMAL history2 <1.0 NEG NEG history2 13 <1 <1 <1 <1 <1 0 15 1				
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Water Glycol WEAR METALS Iron Chromium Ppm AS Nickel Ppm AS Silver Ppm AS Aluminum Ppm AS Copper Ppm AS Cadmium Ppm AS Cadmium Ppm AS Cadmium Ppm AS AS ADDITIVES Boron Barium Molybdenum Manganese Magnesium Ppm AS Calcium Ppm AS	C Method C Method method TM D5185m TM D5185m	>0.2 limit/base >110 >4 >2 >2 >25 >45 >85	NEG NEG current 11 <1 <1 0 0 4 <1	NEG NEG history1 14 <1 0 0 0 0 0	NEG NEG history2 13 <1 <1 <1 <1 0 15				
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Titanium ppm AS Silver ppm AS Aluminum ppm AS Aluminum ppm AS Lead ppm AS Copper ppm AS Tin ppm AS Vanadium ppm AS Cadmium ppm AS ADDITIVES Boron ppm AS Barium ppm AS Molybdenum ppm AS Manganese ppm AS Magnesium ppm AS Calcium ppm AS	TM D5185m TM D5185m TM D5185m TM D5185m TM D5185m TM D5185m TM D5185m	>2 >25 >45 >85	0 0 4 <1 <1	0 0 0 0 <1	<1 0 15				
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Lead ppm AS Copper ppm AS Tin ppm AS Vanadium ppm AS Cadmium ppm AS ADDITIVES Boron ppm AS Barium ppm AS Molybdenum ppm AS Manganese ppm AS Magnesium ppm AS Calcium ppm AS Phosphorus ppm AS Zinc ppm AS	TM D5185m TM D5185m TM D5185m TM D5185m	>45 >85	<1 <1	<1	1				
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Barium ppm AS Molybdenum ppm AS Manganese ppm AS Magnesium ppm AS Calcium ppm AS Phosphorus ppm AS Zinc ppm AS	method	limit/base	current	history1	history2				
MolybdenumppmASManganeseppmASMagnesiumppmASCalciumppmASPhosphorusppmASZincppmAS	TM D5185m	0	6	0	0				
Manganese ppm AS Magnesium ppm AS Calcium ppm AS Phosphorus ppm AS Zinc ppm AS	TM D5185m	0	0	<1	0				
MagnesiumppmASCalciumppmASPhosphorusppmASZincppmAS	TM D5185m	60	82	64	63				
CalciumppmASPhosphorusppmASZincppmAS	TM D5185m	0	<1	<1	<1				
Phosphorus ppm AS Zinc ppm AS	TM D5185m	1010	1232	931	1057				
Zinc ppm AS	TM D5185m	1070	1359	1072	1178				
	TM D5185m	1150	1204	993	1061				
Sulfur nom AS	TM D5185m	1270	1611	1235	1377				
Odildi ppin Ad	TM D5185m	2060	3674	2735	3797				
CONTAMINANTS	method	limit/base	current	history1	history2				
Silicon ppm AS	TM D5185m	>30	5	6	5				
Sodium ppm AS	TM D5185m		29	0	2				
Potassium ppm AS	TM D5185m	>20	1	3	4				
INFRA-RED	method	limit/base	current	history1	history2				
Soot % % *A	STM D7844	>3	0.5	0.7	0.7				
Nitration Abs/cm *A	0.1VI D10T4	>20	7.8	8.5	9.0				
Sulfation Abs/.1mm *A	STM D7624	>30	19.2	20.0	20.3				
FLUID DEGRADATION			FLUID DEGRADATION method limit/base current history1 history2						
Oxidation Abs/.1mm *A	STM D7624 STM D7415	limit/base	current	history1	history2				
Base Number (BN) mg KOH/g AS	STM D7624 STM D7415	limit/base >25	current 14.5	history1 15.9	history2 15.6				



OIL ANALYSIS REPORT

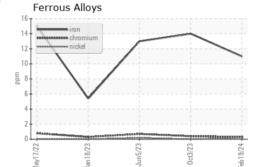


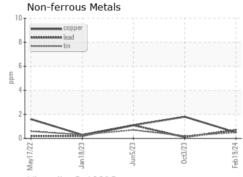


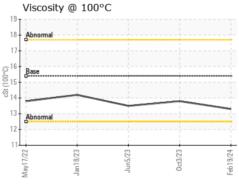
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

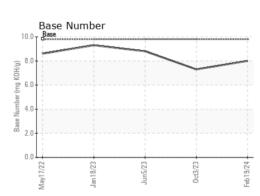
FLUID PROP	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.8	13.5

GRAPHS













Certificate L2367

Laboratory Sample No.

Lab Number : 06104099 Unique Number : 10902329

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0106954

Tested Test Package : FLEET

: 29 Feb 2024 Diagnosed : 29 Feb 2024 - Wes Davis

: 29 Feb 2024

GFL Environmental - 097 - Knoxville Hauling

1901 Sutherland Ave Knoxville, TN US 37921

Contact: RICKY DUNLAP

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)

Received

T:

F: